UNITED STATES DEPARTMENT OF COMMERCE
OFFICE OF TECHNICAL SERVICES

BIBLIOGRAPHY OF SCIENTIFIC AND INDUSTRIAL REPORTS

Vol. 8 — January 16, 1948 — No. 3

CONTENTS

CHEMICALS AND ALLIED PRODUCTS.....189 - 222, 233 - 247
DRUGS AND PHARMACEUTICALS.....189 - 193
DYES.....193 - 196
PAINTS, VARNISHES AND LACQUERS.....196 - 199
ANALYTICAL CHEMISTRY.....199 - 215
MISCELLANEOUS CHEMICALS.....215 - 222

METALS AND METAL PRODUCTS.....222 - 227

PHOTOGRAPHIC AND OPTICAL GOODS (INCLUDING PHOTOGRAPHIC PROCESSING)....227 - 229, 247 - 248

TEXTILES AND TEXTILE PRODUCTS.....229

TRANSPORTATION EQUIPMENT.....229 - 230
AERONAUTICS.....229 - 230

WATER SUPPLY, SANITATION AND PUBLIC HEALTH.....230

MISCELLANEOUS.....231 - 232, 248 - 272

PATENTS.....233 - 272
CHEMICALS AND ALLIED PRODUCTS.....233 - 247
PHOTOGRAPHIC AND OPTICAL GOODS (INCLUDING PHOTOGRAPHIC PROCESSING).....247 - 248
MISCELLANEOUS.....248 - 272

REGISTER OF PATENTS AVAILABLE FOR LICENSING OR SALE.....273 - 276

TRANSLATIONS.....276 - 282

PUBLICATIONS ISSUED BY OFFICE OF TECHNICAL SERVICES.....282

*Indicates that reports in the BIOS, CIOS and FIAT series are deposited in the Library of Congress Depository Libraries. For a complete list of these libraries, see page facing page 1, volume 5, of this Bibliography.

In addition to the indexes described on the back cover of this Bibliography, the Office of Technical Services has published the following reference works:

PB L 81500. HOLLOWAY, O. WILLARD and ISAAC, OLIVER B. Classified list of OTS printed reports: A list of reports on German and Japanese technology, prepared by American investigators, which are available in printed form from the Office of Technical Services. Oct 1947. 59 p. Price: 75¢

PB L 78000. LOWRY, W. KENNETH. OSRD reports: Bibliography and index of declassified reports having OSRD numbers. Jun 1947. 105 p. Price: 75¢

PB L 58101-R. SWIFT, GRACE. Government document series, analyzed by Office of Technical Services. Rev. Nov 1947. 45 p. Price: 25¢

PB L 79322. SWIFT, GRACE and OHNE, JERROLD. Subject headings for technical libraries. Jun 1947. 167 p. Price: $1.50

PB L 81803. U. S. OFFICE OF TECHNICAL SERVICES, TECHNICAL INDUSTRIAL INTELLIGENCE DIVISION. Reports resulting from the investigation of German technology, 1945-1946, and index of personnel. May 1947. 207 p. Price: $5.25

CHEMICALS AND ALLIED PRODUCTS

Drugs and Pharmaceuticals

PB L 4674. I. G. FARBENINDUSTRIE A. G., WUPPERTAL-ELBERFELD, GERMANY. Production and uses of pharmaceuticals and their intermediates. (PIAT (JIOA) Microfilm Reel MP 13, Frames 1-1007) 1924-1945. 1007 f. Price: Microfilm-$6.00 - Enlargement print-$101.00

This PIAT microfilm reel contains descriptions of the production of pharmaceuticals and their intermediates, obtained at I. G. Wuppertal-Elberfeld. 226 individual items, listed below, will be available as enlargement prints. Please give PB and frame numbers when ordering an individual item. These reports are in German.

Frames	Title	Price
1 PB L 4674	Index of items, frames 2-10. In German.	$1.50
2 PB L 4674	"Amylokoll (D)." By Leucha. 1942. In German.	1.50
3-7 PB L 4674	"A. T. Cellulose B" and "BB"; "Benzylcellulose." By Leucha. 1936. In German.	1.50
8 PB L 4674	"Cellaurat" (moist). 1941. In German.	1.50
9-10 PB L 4674	Index of items, frames 11-99. In German.	1.50
11-12 PB L 4674	"Abrodil." By Zimmermann. 1935-1942. In German.	1.50
13 PB L 4674	Ethanol-perabrodil. By Zimmermann. 1939-1942. In German.	1.50
14-16 PB L 4674	"Arizyl" (disodium salt of arsenoacetic acid). By Wolff. 1936. In German.	1.50
17-18 PB L 4674	"Asparidol." By Zimmermann. 1933-1942. In German.	1.50
19 PB L 4674	"Dawol" - stock solution ("Dontalol"). By Zimmermann. 1937. In German.	1.50
20-21 PB L 4674	Diethanolamine. By Moré and Zimmermann. 1933-1942. In German.	1.50
22 PB L 4674	"Imgetal." By Zimmermann. 1933-1942. In German.	1.50
23-24 PB L 4674	Rehmic acid. By Wolff and Zimmermann. 1936-1942. In German.	1.50
25-26 PB L 4674	Ribose (incomplete). By Zimmermann. 1943. In German.	1.50
27 PB L 4674	Lactoflavin (Vitamin B_2). By Zimmermann. 1943. In German.	1.50
28-30 PB L 4674	"Methylidebenal." Signature illegible. 1944. In German.	1.50
31-32 PB L 4674	"Maiolan." By Zimmermann. 1935-1942. In German.	1.50
33-35 PB L 4674	"Novolalkohol." By Schröter and Zimmermann. 1939-1942. In German.	1.50
36-47 PB L 4674	"Novoldiamin." By Schröter and Zimmermann. 1934-1942. In German.	1.50
48-50 PB L 4674	"Novolsalz." By Zimmermann. 1942. In German.	1.50
51-52 PB L 4674	"Novolester", crude. By Moré. 1929. In German.	1.50
53-56 PB L 4674	"Novolsalz." By Zimmermann and Andereag. 1937-1939. In German.	1.50
57-64 PB L 4674	"Novolid." By Moré and Zimmermann. 1929-1942. In German.	1.50
65-75 PB L 4674	"Polvirmasburo." By Moré and Zimmermann. 1933-1942. In German.	1.50
76-77 PB L 4674	"Sarin" (Sarcosine anhydride). By Zimmermann. 1942. In German.	1.50
78 PB L 4674	"Septasin." By Zimmermann. 1941. In German.	1.50
79-81 PB L 4674	"Sinon." By Zimmermann. 1934. In German.	1.50
82-85 PB L 4674	Sulfoguanidine. By Medick. 1944. In German.	1.50
86-88 PB L 4674	Thioglycolic acid. By Zimmermann. 1931-1942. In German.	1.50
89-99 PB L 4674	"Vogan." By Aschagen and Zimmermann. 1937-1942. In German.	1.50
100 PB L 4674	Index of items, frames 101-136. In German.	1.50
101-111 PB L 4674	Aldol-1-naphthylamine products. Signature illegible. 1941-1944. In German.	1.50
112-120 PB L 4674	Accelerator "576" and "576 extra." Signature illegible. 1941-1944. In German.	1.50
121 PB L 4674	"Plastol LB." 1941. In German.	1.50
122-134 PB L 4674	"TC" resin. Signature illegible. 1941-1944. In German.	1.50
135-136 PB L 4674	"Vulkanit F P." 1941. In German.	1.50
137-145 PB L 4674	"Amylenhydrat." By Dörr. 1944. In German.	1.50
146-148 PB L 4674	"Antisol." By Dörr. 1943-1944. In German.	1.50
149-152 PB L 4674	"Oravisol." By Dörr. 1943. In German.	1.50
153-154 PB L 4674	"Jasanral." By Dörr. 1943. In German.	1.50
155-157 PB L 4674	Methyl acetamide. By Dörr. 1943-1944. In German.	1.50
158-171 PB L 4674	"Pardinan." By Medick. 1943. In German.	1.50
172 PB L 4674	Index of items on frames 173-251. In German.	1.50
173-175 PB L 4674	"Abegin." Signature illegible. 1930. In German.	1.50
176-181 PB L 4674	"Adalin." By Herwig. 1930. In German.	1.50
182-183 PB L 4674	"Afridol." By Jaeger. 1940. In German.	1.50
184-185 PB L 4674	Allylphenyl barbituric acid. By Jaeger. 1943. In German.	1.50
186-188 PB L 4674	"Aminomethylester H." By Jaeger. 1942. In German.	1.50
189 PB L 4674	"Arginobin." By Jaeger. 1943. In German.	1.50
190-191 PB L 4674	"C-Ester." By Jaeger. 1942. In German.	1.50
192 PB L 4674	"Chininbase." By Jaeger. 1943. In German.	1.50

193-194 PB L 4674 — "Compral." By Herwig. n. d. In German. 1.50

195 PB L 4674 — "Dicyanid." 1943. In German. 1.50

196-197 PB L 4674 — "Diester M." By Jaeger. 1942. In German. 1.50

198-199 PB L 4674 — "Endormesier." By Jaeger. 1941. In German. 1.50

200-202 PB L 4674 — "Evipan." By Jaeger. 1941. In German. 1.50

203-204 PB L 4674 — "Evipan-Natrium." By Jaeger. 1941. In German. 1.50

205-212 PB L 4674 — "Hydrastinin." n. d. In German. 1.50

213-215 PB L 4674 — Method for the electrolytic reduction of homopiperonaloxim to homopiperonylamine with lead cathodes. By Dörr and Lode. 1938. In German. 1.50

216-220 PB L 4674 — "Luminal." By Jaeger. 1941-1943. In German. 1.50

221-226 PB L 4674 — "Novasurol." By Herwig. 1927. In German. 1.50

227 PB L 4674 — "OX - Natrium." By Jaeger. 1940. In German. 1.50

228-231 PB L 4674 — Phanodorm. By Jaeger. 1938-1943. In German. 1.50

232-234 PB L 4674 — Prominal. By Jaeger. 1942-1943. In German. 1.50

235-237 PB L 4674 — "Ristin." By Herwig. 1930. In German. 1.50

238-241 PB L 4674 — "Spirosal." By Herwig. 1930. In German. 1.50

242-252 PB L 4674 — "Veronal A" and "B." By Jaeger. 1941-1943. In German. 1.50

253 PB L 4674 — "Vesonsals." By Jaeger. 1940. In German. 1.50

254-255 PB L 4674 — Index of items on frames 256-420. By Ruhwedel. 1943. In German. 1.50

256-261 PB L 4674 — "Amichin." By Lautenschlager. 1945. In German. 1.50

262-263 PB L 4674 — "Aricyl." By Wolff. 1938. In German. 1.50

264-265 PB L 4674 — "Benzyl-Antileprol." By Wolff. 1934. In German. 1.50

266 PB L 4674 — "Campoferron." By Schuls. 1943. In German. 1.50

267-278 PB L 4674 — "Campolon." By Wolff. 1936-1943. In German. 1.50

279-281 PB L 4674 — "Candiolin." By Wolff. 1936. In German. 1.50

282-283 PB L 4674 — Cassin. By Wolff. 1936. In German. 1.50

284-287 PB L 4674 — Cholesteryl acetate. By Wolff. 1940. In German. 1.50

288 PB L 4674 — Duplication of Frame 19.

289-290 PB L 4674 — "Eidoform." By Wolff. 1940. In German. 1.50

291-302 PB L 4674 — "Galaktose." By Lautenschlager. 1941-1945. In German. 1.50

303-308 PB L 4674 — Heptyne. By Wolff. 1926-1931. In German. 1.50

309-313 PB L 4674 — Hexetone. By Wolff. 1924. In German. 1.50

314-318 PB L 4674 — Histamine. By Luigi. 1940. In German. 1.50

319-321 PB L 4674 — Histidine. By Wolff. 1920. In German. 1.50

322-323 PB L 4674 — "Ixelon" concentrate. By Wolff. 1933. In German. 1.50

324-327 PB L 4674 — Lyvertase. By Wolff. 1940. In German. 1.50

328-331 PB L 4674 — "Jodipan." By Wolff. 1936. In German. 1.50

332-340 PB L 4674 — Methyl Iodide. By Contelle. 1933. In German. 1.50

341 PB L 4674 — "Jothion." By Wolff. 1939. In German. 1.50

342-343 PB L 4674 — Collidine pure. By Schuls. 1943. In German. 1.50

344-346 PB L 4674 — "Mykol." By Wolff. 1936. In German. 1.50

347 PB L 4674 — "Manatol K S." By Schuls. 1943. In German. 1.50

348 PB L 4674 — "Murnil." By Wolff. 1937. In German. 1.50

349-357 PB L 4674 — Padutin. By Schuls. 1943. In German. 1.50

358-359 PB L 4674 — Hydroxyphenylethylamine hydrochloride. By Wolff. 1925. In German. Not very legible. 1.50

360-365 PB L 4674 — "Prolan." By Wolff. 1936. In German. 1.50

366-367 PB L 4674 — Lipatrea from cattle brains. By Wolff and Schuls. 1936-1943. In German. 1.50

368-369 PB L 4674 — Salodin. By Lautenschlager. n. d. In German. 1.50

370-374 PB L 4674 — "Solarsonsaeure." By Kühn. n. d. In German. 1.50

375 PB L 4674 — Purifying carbon tetrachlorids for Serstin. By Kühn. n. d. In German. 1.50

376-389 PB L 4674 — "Tibatin." By Lautenschlager. 1941-1945. In German. 1.50

390-391 PB L 4674 — Tyrosine. By Wolff. 1924. In German. 1.50

392-394 PB L 4674 — "Undan" from mares' urine. By Lautenschlager. 1944. In German. 1.50

395-396 PB L 4674 — Benzoylation of estrone. By Lautenschlager and Schuls. 1943. In German. 1.50

397-402 PB L 4674 — "Vaduril" By Lautenschlager. 1941. In German. 1.50

403-420 PB L 4674 — "Jatrensaeure." By Contelle and Gundlach. 1932-1945. In German. 2.00

421-422 PB L 4674 — Index of items on frames 423-675. In German. 1.50

423-425 PB L 4674 — Ethoxy acetic acid. By Gänsler. 1942. In German. 1.50

434-433 PB L 4674 — Phenylethylmalonic acid. By Odnzler. 1942-1944. In German. 1.50

434-435 PB L 4674 — Allyl alcohol and allylbromide. n. d. In German. 1.50

436-438 PB L 4674 — "Amichin." By Odnzler. 1942. In German. 1.50

439-452 PB L 4674 — "A. T. 10" and Vitamin D_2. By Odnzler and Heimhold. 1939-1942. In German. 1.50

453-461 PB L 4674 — "Avertin." By Odnzler. 1942. In German. 1.50

462-463 PB L 4674 — Benzylcyanide. By Odnzler. 1942. In German. 1.50

464-465 PB L 4674 — Ethyl succinate. By Odnzler. 1942. In German. 1.50

466-469 PB L 4674 — Bromoethyl technical and bromoethyl distilled. By Odnzler. 1936. In German. 1.50

470-475 PB L 4674 — Bromal. By Odnzler. 1941. In German. 1.50

476 PB L 4674 — Hydrogen bromide. By Hans P. Müller. 1934. In German. 1.50

477-480 PB L 4674 — "Carosan" wet stain. By Odnzler. 1943. In German. 1.50

481-484 PB L 4674 — "C-ester." By Odnzler. 1942. In German. 1.50

485-486 PB L 4674 — Cicnolin. By Odnzler. 1935. In German. 1.50

487-489 PB L 4674 — Cresoacetamide. By Odnzler. 1942. In German. 1.50

490-498 PB L 4674 — "Cyren." By Medick. 1940. In German. 1.50

499 PB L 4674 — 7-Dehydrocholesterol. By Linsert. 1939. In German. 1.50

500 PB L 4674 — "Deuteryl." By Odnzler. 1943. In German. 1.50

501-505 PB L 4674 — "Diethylcrasester." By Odnzler. 1936. In German. 1.50

506-510 PB L 4674 — "Dibenzoat." By Odnzler. 1939. In German. 1.50

511-512 PB L 4674 — Dimethylamine solution. By Odnzler. In German. 1.50

513-515 PB L 4674 — Dinitrobenzoyl chloride. By Odnzler and Heimhold. 1943. In German. 1.50

516-519 PB L 4674 — Dinitrotoluyl chloride. By Odnzler and Heimhold. 1943. In German. 1.50

520 PB L 4674 — Processing of isopropyl alcohol. By Odnzler. 1932. In German. 1.50

521-526 PB L 4674 — Keto (7-ketocholesterol acetate). By Odnzler. 1939. In German. 1.50

527-531 PB L 4674 — Crystallized vitamin D_2. By Linsert. 1936. In German. 1.50

532 PB L 4674 — "Kükenvitamin D." By Odnzler and Heimhold. 1942. In German. 1.50

533-545 PB L 4674 — "Lunchlorid." By Odnzler. 1942-1943. In German. 1.50

546-551 PB L 4674 — "Lunsilikat." By Odnzler. 1936. In German. 1.50

552-556 PB L 4674 — "Lunsulfan." By Odnzler. 1940. In German. 1.50

557-559 PB L 4674 — Malonic ester. By Odnzler. 1938. In German. 1.50

560-561 PB L 4674 — "M.B.-Chlorid." By Odnzler. 1938. In German. 1.50

562-563 PB L 4674 — Bromsterol. By Odnzler. 1943. In German. 1.50

564 PB L 4674 — Drying of oil. By Odnzler and Heimhold. 1943. In German. 1.50

565-569 PB L 4674 — "Oxythiazol." By Odnzler. 1939. In German. 1.50

570-571A PB L 4674 — "Phenylsulfosäure" (o-Ethyl-o-toluic acid). By Odnzler. 1944. In German. 1.50

572-578 PB L 4674 — "Phenester A" (o-Toluic acid ethyl ester). By Heimhold. 1942. In German. 1.50

579-580 PB L 4674 — "Phenester M" (o-Toluic acid methyl ester). By Odnzler. 1938. In German. 1.50

581-583 PB L 4674 — "Phenylsäure" (o-Toluic acid). By Odnzler. 1938. In German. 1.50

584-590 PB L 4674 — "Phenylmalonester." By Odnzler. 1942. In German. 1.50

591-592 PB L 4674 — "Pulbit." By Odnzler. 1939. In German. 1.50

593 PB L 4674 — Crude "Sephirol." By Leuchs. 1942. In German. 1.50

594-596 PB L 4674 — "Solbromid." By Odnzler. 1942. In German. 1.50

597-600 PB L 4674 — "Solesäure." (o-Ethyl-butyric acid). By Odnzler. 1943. In German. 1.50

601 PB L 4674 — Stock solution for "Vicanol." By Odnzler and Heimhold. 1942. In German. 1.50

602-611 PB L 4674 — "Thiuram." By Odnzler. 1928-1942. In German. 1.50

612-613 PB L 4674 — "Vicanol" cream and red for animals. By Odnzler and Heimhold. 1942. In German. 1.50

614-617 PB L 4674 — "Zalid." By Odnzler. 1937-1943. In German. 1.50

618-625 PB L 4674 — Trichlorethanol. By Odnzler. 1942. In German. 1.50

626 PB L 4674 — "Trityl" (p-nitrobenzoyl chloride). By Odnzler. 1943. In German. 1.50

627 PB L 4674 — "Trivitan." By Odnzler. 1942. In German. 1.50

628-630 PB L 4674 — "Vicanol forte." By Odnzler and Heimhold. 1942. In German. 1.50

631 PB L 4674 — Vitamin D mixture for animals red. By Odnzler and Heimhold. 1942. In German. 1.50

632-639 PB L 4674 — Vitamin D_3. By Linsert. 1939. In German. 1.50

640-643 PB L 4674 — Description of irradiation installation. By Schmidt-Nalve. n. d. In German. 1.50

644-647 PB L 4674 — "Vulkacit 1000." By Odnzler. 1936. In German. 1.50

648-668 PB L 4674 — "W 491" (2-chloro-4-dimethylamino-6-methylpyrimidine). By Odnzler

and Heimhold. 1943-1944. In German. 2.50

669-675 PB L 4674 — Ephirol. By Günzler. 1937-1942. In German. 1.50

676 PB L 4674 — Index of items on frames 677-750. In German. 1.50

677-683 PB L 4674 — "Acetsäure." By Wiegand. 1941-1942. In German. 1.50

684-685 PB L 4674 — Acetyl-benzylamine. By Wiegand. 1942. In German. 1.50

686-691 PB L 4674 — "Acetylsalicylsäure L." 1929. In German. 1.50

692-694 PB L 4674 — "Acidol." By Wassmuth. 1940. In German. 1.50

695-705 PB L 4674 — Aspirin. By Wassmuth. 1930-1935. In German. 1.50

706-707 PB L 4674 — 4,4'-Diamino-diphenyl-sulfone. By Wiegand. 1942. In German. 1.50

708-722 PB L 4674 — "Germanin-Harnsol." By Wiegand. 1941. In German. 1.50

723 PB L 4674 — "Helmitol." By Wassmuth. 1940. In German. 1.50

724-730 PB L 4674 — "Heroin." Signature illegible. 1938. In German script. 1.50

731-738 PB L 4674 — Pharmaceutically pure "Hexa." By Wassmuth and Wiegand. 1931-1932. In German. 1.50

739 PB L 4674 — "Methylensäure" (Anhydromethylene citric acid). By Wassmuth. In German. 1.50

740 PB L 4674 — Strychnine methylarsenate. By Wassmuth. 1923. In German (handwritten). 1.50

741-742 PB L 4674 — "Yohimbin" methylarsenate. By Wassmuth. 1923-1925. In German (handwritten in part). 1.50

743-744 PB L 4674 — Monoacetylurea. By Wiegand. 1942. In German. 1.50

745 PB L 4674 — "Ortison." By Wassmuth. 1938. In German. 1.50

746-749 PB L 4674 — "Selveral." By Wiegand. 1942. In German. 1.50

750 PB L 4674 — "Septasin." By Zimmermann. 1941. In German. 1.50

751-752 PB L 4674 — Index of items on frames 753-1007. In German. 1.50

753-754 PB L 4674 — Antimony oxide paste. By Bauer. 1941. In German. 1.50

755-762 PB L 4674 — "Antimosan." By Schmidt and Bauer. 1941-1944. In German. 1.50

763-764 PB L 4674 — "Astrosol." By Bauer. 1940. In German. 1.50

765-767 PB L 4674 — Preparation of benzylphenol from dibenzyl ether. By Dörr and Gundlach. 1935-1941. In German. 1.50

768-776 PB L 4674 — "Brassnatrium." By Bauer. 1940-1944. In German. 1.50

777-778 PB L 4674 — "Bromocoll." By Gundlach. 1941. In German. 1.50

779-780 PB L 4674 — "Butolan." By Bauer. 1940. In German. 1.50

781-787 PB L 4674 — "Castrix" grains. By Gundlach and Leonhard. 1943-1944. In German. 1.50

788-789 PB L 4674 — "Corrytin." By Bauer. 1940. In German. 1.50

790-797 PB L 4674 — "Elendron." By Bauer. 1941. In German. 1.50

798-800 PB L 4674 — "Euvirin." By Janssen. n. d. In German. 1.50

801-806 PB L 4674 — "Filtracol." By Gundlach. 1941. In German. 1.50

807-808 PB L 4674 — The preparation of vitamin free feeds. By Wolff. 1936. In German. 1.50

809-810 PB L 4674 — "Istisin." (1,8-dihydroxyanthraquinone). By Günzler. 1932. In German. 1.50

811 PB L 4674 — Tin sponge. By Günzler. 1932. In German. 1.50

812-846 PB L 4674 — "Mitigal." By Gundlach. 1938-1943. In German. 3.50
A small part is illegible.

847-850 PB L 4674 — "Nichin" and "Nichin A." By Gundlach and Bauer. 1942-1944. In German. 1.50

851-853 PB L 4674 — "Novolbromid." By Gundlach. 1941. In German. 1.50

854-859 PB L 4674 — "Novantisolsäure." By Bauer and Lautenschlagen. 1940-1944. In German. 1.50

860-872 PB L 4674 — "Oxychin." By Bauer and Gundlach. 1941-1944. In German. 1.50

873-877 PB L 4674 — "Piphen" (N,N'-diphenyl piperazine). By Bauer. 1940. In German. 1.50

878-879 PB L 4674 — Presinol. By Dörr. 1940. In German. 1.50

880-887 PB L 4674 — "Astrocid" (Prontalbin) (=Sulfanilamide). By Bauer and Gundlach. 1941. In German. 1.50

888-892 PB L 4674 — "Prontosil - Base." By Bauer and Gundlach. 1941-1944. In German. 1.50

893-895 PB L 4674 — "Prontosil S." By Bauer and Gundlach. 1941-1944. In German. 1.50

896-900 PB L 4674 — "Protargol." By Gundlach. 1941. In German. 1.50

901-902 PB L 4674 — "Pyrazin." n. d. In German. 1.50

903-905 PB L 4674 — "Salol." By Bauer. 1940. In German. 1.50

906-915 PB L 4674 — "Salophen." By Gundlach. 1940. In German. 1.50
Poorly legible.

916-918 PB L 4674 — Soap and soap solutions. By Gundlach. 1941. In German. 1.50

919-923 PB L 4674 — "Solustibosan." By Schmidt. 1942. In German. 1.50

924-951 PB L 4674 — Somatose. By Coutelle and others. 1929-1941. In German. 3.00

952-961 PB L 4674 — Sulfapyridine. By Dörr and Gundlach. 1940-1943. In German. 1.50

962-964 PB L 4674 — "Sulfosoltalk." By Gundlach. 1940. In German. 1.50

965 PB L 4674 "Solgalk." By Gundlach. 1940. In German. 1.50

966 PB L 4674 "Tutocain II." By Gundlach. 1945. In German. 1.50

967 PB L 4674 "Tannigen." 1941. In German. 1.50

968-972 PB L 4674 "Tutocain." By Gundlach. 1942. In German. 1.50

973-978 PB L 4674 "Uliron A." By Remer. 1940-1941. In German. 1.50

979-985 PB L 4674 "Uliron B." By Remer and Dörr. 1940-1941. In German. 1.50

986-988 PB L 4674 "Uliron C." By Dörr. 1940. In German. 1.50

989-995 PB L 4674 Volumtal. By Gundlach. 1940. In German. 1.50

996-998 PB L 4674 "Vulkanol B." By Gundlach. 1940. In German. 1.50

999-1005 PB L 4674 "Wegon - Gel." By Gundlach. 1941. In German. 1.50

1006-1007 PB L 4674 "Zelio" - grains. By Gundlach. 1943. In German. 1.50

Dyes

PB L 85701. ŌTA, MASAKI. A new derivative of hesperidin. Feb 1942. 10 p. Price: Microfilm-$1.00 - Photostat-$1.00

This document is a record of research carried out by Mr. Ōta in his attempts to obtain a new derivative of the citrin by-product hesperidin readily soluble in water and easily reducible to hesperidin. Results of experiments are shown by diagrams. In Japanese with a partial English translation and appended bibliography. This article was originally published in Yakugaku Zasshi (Journal of the Pharmaceutical Society of Japan), v. 62, No. 2.

PB L 20847. I. G. FARBENINDUSTRIE A. G. Reports at the 16th meeting of the Azo Dyes Commission (Ako). (FIAT Microfilm Reel C-92, Frames 3874-4411, 16 mm.) Dec 1941. 537 f. Price: Microfilm-$6.00 - Enlargement print-$54.00.

The individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $6.00. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

PB Numbers Frames	Title	Price
L 46750 Frame 3874	Reports for the 16th meeting of the Scientific Azo Dyes Commission on the 16th of December, 1941. (Title page). In German.	$1.00
	Reports from Ludwigshafen	
L 46751 Frames 3875-3881	Cobalt complexes of azo dyestuffs containing sulfo groups. In German.	1.00
L 46752 Frames 3882-3888	Chrome-developed dyes from o-chloro-azo dyestuffs and 8-aminoquinoline. In German.	1.00
L 46753 Frames 3889-3899	Neutral dying, metal-complex dyestuffs. (In parts difficult to read). In German.	1.00
L 46754 Frames 3900-3902	Research on "Brasuil" dyes. In German.	1.00
L 46755 Frames 3903-3911	Research on "Benzosecht" chrome dyestuffs. In German.	1.00
L 46756 Frames 3912-3926	"Benzosecht" chrome dyestuffs of the blue series. In German.	1.00
L 46757 Frames 3927-3941	Cotton dyes with additive metallizability. In German. In parts difficult to read.	1.00
L 46758 Frames 3942-3949	Acetate rayon dyes soluble in water. In German.	1.00
L 46759 Frames 3950-3955	Production of beta-naphthol aldehyde by the Gattermann synthesis. In German.	1.00
L 46760 Frames 3956-3965	Lamacen - L - Light Yellow (2,2'-dihydroxynaphthaldazine). In German. In parts difficult to read.	1.00
L 46761 Frames 3966-3972	Lamacen - L - Orange-Yellow. (2,2'-dihydroxybenzaldazine). In German.	1.00
L 46762 Frames 3973-4022	Aldazines of aromatic hydroxyaldehydes and their fluorescent properties. In German.	4.00
L 46763 Frames 4023-4052	On the chrome complex dyestuffs of "Acna" (Stenacina dyes) and the patent situation in Italy. In German.	2.00
L 46764 Frames 4053-4064	Information on the constitution of novel "Benzosecht" dyes of commercial (Ciba). In German.	1.00
L 46765 Frames 4065-4069	"Benzosecht" dyestuffs soluble in esters. In German.	1.00
	Report from Höchst.	
L 46766 Frames 4070-4089	Yellow "Anthralan" dyestuffs with improved light-fastness. In German.	2.00
	Reports from Mainkur.	
L 46768 Frames 4090-4127	Wool dyes. In German.	3.00
L 46769 Frames 4127A-4129	Experiments on the production of a "Benzosecht" Copper Green ("Benzosecht" Chrome Green). In German.	1.00
	Reports from Leverkusen	
L 46770 Frames 4130-4149	"Benzoform" dyes. In German.	2.00
L 46771 Frames 4150-4161	Conversion products of glycocoll and sarcosin with sulfonyl and carbonyl chlorides. In German.	1.00
L 46772 Frames 4162-4169	Second referat Wolfen collection of abstracts on work done at the Wolfen plant. In German.	1.00
	Reports from Ffm-Höchst.	
L 46775 Frames 4170-4180	Research in the field of azo dyes. In German.	1.00
L 46776 Frames 4181-4190	Report on products in the "Naphthol AS" field. In German.	1.00

Dyes (contd)

L 46777 Frames 4191-4197 — List of reports of the "Teko" meeting of the "Ako" at Offenbach on 25 March1936. List of the Black H-acid and G-acid dyes. In German. 1.00

L 46778 Frames 4198-4206 — Direct Deep Black. (Leverkusen.) In German. 1.00

L 46779 Frames 4207-4220 — Pluto Black group. (Wolfen.) In German. 1.00

L 46780 Frames 4221-4226 — Black series for artificial rayon. (Wolfen.) In German. 1.00

L 46781 Frames 4227-4231 — Diamine Black BH. (Leverkusen.) In German. 1.00

L 46782 Frames 4232-4236A — Amido Black 10 B. (Leverkusen.) In German. 1.00

L 46783 Frame 4237 — List of substantive red and brown dyestuffs. In German. 1.00

L 46784 Frames 4238-4242 — Congo Red. (Leverkusen.) In German. 1.00

L 46785 Frames 4243-4245 — Benzopurpurin 4B and 10 B. (Leverkusen.) In German. 1.00

L 46786 Frames 4246-4149 — Mixed couplings. (Leverkusen.) In German. 1.00

L 46787 Frames 4250-4252 — The "Benzoscht" Scarlet series. (Leverkusen.) In German. 1.00

L 46788 Frames 4253-4261 — Metanil Yellow. (Ludwigshafen.) In German. 1.00

L 46789 Frames 4262-4265 — Agoflavines. (Ludwigshafen.) In German. 1.00

L 46790 Frames 4266-4301 — Pyrazolone dyes including "Tartrazin" (Höchst.) In German. 3.00

L 46791 Frame 4302 — Chrome Black series. List of reports. In German. 1.00

L 46792 Frames 4303-4311 — Diamant Black PV and P2B. (Leverkusen.) In German. 1.00

L 46793 Frames 4312-4316 — Chromogen Black WE00 Special. (Leverkusen.) In German. 1.00

L 46794 Frames 4317-4319 — Acid Alizarin Black B. (Leverkusen.) In German. 1.00

L 46795 Frames 4320-4322 — Brands of Anthracene Chrome Black. (Leverkusen.) In German. 1.00

L 46796 Frame 4323 — Diamant Black PA. (Leverkusen.) In German. 1.00

L 46797 Frames 4324-4331 — Basic azo dyes. (Wolfen.) In German. 1.00

L 46798 Frame 4332 — List of reports of lacquer dyes. In German. 1.00

L 46799 Frames 4333-4347 — Hansa Yellow. (Höchst.) In German. 1.00

L 46800 Frames 4348-4358 — Lacquer dyes of the "Litholrubin" and "Litholrot" class. (Ludwigshafen.) In German. 1.00

L 46801 Frames 4359-4380 — Beta-naphthol pigments. (Höchst.) In German. 2.00

L 46802 Frames 4381-4386 — Sudan dyes. (Wolfen.) In German. In places difficult to read. 1.00

L 46803 Frame 4387 — "Diaminkatechin" - list of reports. In German. 1.00

L 46804 Frames 4388-4391 — Orange II. (Leverkusen.) In German. 1.00

L 46805 Frames 4392-4399 — "Diaminkatechin B". (Leverkusen.) In German. 1.00

L 46806 Frames 4400-4408 — "Diaminkatechin G." (Leverkusen.) In German. 1.00

L 46807 Frames 4409-4411 — "Diaminkatechin 3G." (Leverkusen.) In German. 1.00

L 46749 — Reports at the 16th meeting of the Aso Dyes Commission (Ako): Index. In German. 1.00

PB L 70150. I. G. FARBENINDUSTRIE A. G., FRANKFURT AM MAIN, GERMANY. Organic preparations. (FIAT Microfilm Reel J-10, Frames 1-594). 1931-1941. 588 f.
Price: Microfilm-$6.00 - Enlargement Print-$59.00
This reel was prepared by FIAT investigators in Germany. 85 individual items are listed below will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
1-28 PB L 70150	Amino-diphenylsulfones and -poly-sulfones. By Mahler. 1931-1932. In German.	$3.00
29-40 PB L 70150	4-amino-3-methoxydiphenylamine. n. d. In German.	1.50
41-61 PB L 70150	Aminosulfones and dyestuffs there-from. By Mahler. 1933. In German.	2.50
62-90 PB L 70150	Dyestuffs from substituted 3,4-benzo-pyrazolones. By Mahler. Sep 6, 1934. In German.	3.00
91-107 PB L 70150	Intermediates for dyestuffs and pharmaceutical products. By Lamm. n.d. In German.	2.00
108-110 PB L 70150	Acetoacetanilide. By Mengel. Oct 14, 1940. In German.	1.50
111-121 PB L 70150	Dyestuff intermediates, preliminary products for pharmaceuticals and textile auxiliaries. By Lamm. n. d. In German.	1.50

122-128 PB L 70150 Determination of water in aniline. By Staehlin. Nov 17, 1931. In German. 1.50

129-137 PB L 70150 Sulfone manufacture. By Mahler. Mar 28, 1933. In German. 1.50

138-151 PB L 70150 Iron oxide color manufacture. By Holtz, and Thoma. Feb 7, 1936. In German. 1.50

152-157 PB L 70150 Acetoacetic arylamides. By Mengel. Jan 18, 1937. In German. 1.50

158-176 PB L 70150 Ethylsulfuric acid and diethyl sulfate. By Sander. Aug 14, 1937. In German. 2.00

177-209 PB L 70150 Phenol from aniline. By Hilpert and others. 1938. In German. 3.50

210-215 PB L 70150 Nitrobenzene. By Hotz and Hilpert. Jun 30, 1938. In German. 1.50

216-233 PB L 70150 4'-Methoxy-4-aminodiphenylamine sulfate and sodium sulfonate. By Waldmüller. 1939. In German. 2.00

234-240 PB L 70150 Methane chlorination. By Petri. Dec 30, 1942. In German. 1.50

241-249 PB L 70150 Nitrobenzene. By Hotz. Mar 14, 1935. In German. 1.50

250-258 PB L 70150 Sodium oxalacetic ester. By Kissling. Dec 20, 1935. In German. 1.50

259-266 PB L 70150 Aniline distillation. By Hotz. May 22, 1936. In German. 1.50

267-277 PB L 70150 Distillation of benzene hydrocarbons and methanol. By Hilpert. Oct 26, 1937. In German. 1.50

278-294 PB L 70150 Fluorine compounds (organic). By Eckelmann and Podschus. Apr 29, 1940. In German. 2.00

295 PB L 70150 p-Xylylene chloride. By Scherer. Jul 16, 1940. In German. 1.50

296-379 PB L 70150 Hydrogen and methane from illuminating gas. By Eggert. Dec 30, 1937. In German. 8.50

380-386 PB L 70150 Nitrobenzene. By Frobenius. n. d. In German. 1.50

387-401 PB L 70150 Synthetical camphor. n. d. In German. 1.50

402-418 PB L 70150 I. G. - Wax. Dec 19, 1930. In German. 2.00

419-424 PB L 70150 Mono- and trichloracetic acids. n. d. In German. 1.50

425-427 PB L 70150 Acetic anhydride. Calcined sodium acetate. n. d. In German. 1.50

428-429 PB L 70150 1-Acetamino-2,4-dinitrobenzene. By Waldmüller. Oct 11, 1934. In German. 1.50

430-435 PB L 70150 1-Amino-2-naphthol-4-sulfonic acid. By Waldmüller. May 14, 1937. In German. 1.50

436-437 PB L 70150 5-Chloro-1-diazo-2-naphthol-4-sulfonic acid. By Waldmüller. Jun 1937. In German. 1.50

438-441 PB L 70150 4'-Methoxy-4-aminodiphenylamine-2-sulfonic acid. By Waldmüller. May 13, 1937. In German. 1.50

442-443 PB L 70150 4'-Methoxy-4-aminodiphenylamine sulfate. By Waldmüller. May 13, 1937. In German. 1.50

444-445 PB L 70150 5-Nitro-2-chloro-4-sulfobenzoic acid. By Waldmüller. May 13, 1937. In German. 1.50

446-450 PB L 70150 Chlorotoluidinesulfonic acids. By Waldmüller. May 14, 1937. In German. 1.50

451-452 PB L 70150 4'-Chloro-4-aminodiphenylamine-2-sulfonic acid. By Waldmüller. Oct 9, 1936. In German. 1.50

453 PB L 70150 Sodium 2-chlorotoluene-4-sulfonate. By Waldmüller. May 13, 1937. In German. 1.50

454-455 PB L 70150 Etnyl sulfuric acid and diethyl sulfate. By Waldmüller. Nov 23, 1934. In German. 1.50

456 PB L 70150 Dinitrochlorobenzoic acids. By Waldmüller. June 1937. In German. 1.50

457-458 PB L 70150 2,7-Naphtholsulfonic acid. By Waldmüller. Nov 26, 1934. In German. 1.50

459-460 PB L 70150 Hansa green GG. By Waldmüller. Jun 1937. In German. 1.50

461-463 PB L 70150 6-Chloro-2-nitrotoluene-sulfonic acid. By Waldmüller. Jun 1937. In German. 1.50

464-466 PB L 70150 2,7-Naphthalenedisulfonic acid. By Waldmüller. Jun 1937. In German. 1.50

467-469 PB L 70150 1-Phenyl-5-pyrazolone-3-carboxylic acid amide. By Waldmüller. May 9, 1934. In German. 1.50

470-471 PB L 70150 2,4-Dihydroxybenzoic acid. By Waldmüller. Jun 1937. In German. 1.50

472 PB L 70150 p-Toluenesulfonic acid. By Waldmüller. May 22, 1939. In German. 1.50

473 PB L 70150 4,4'-Diamino-2,2'-ditolylmethane. By Waldmüller. Jun 1937. In German. 1.50

474-478 PB L 70150 Nitro BB. (Condensation product from anthranilic acid and nitrobenzene sulfochloride). By Lanz. Mar 17, 1937. In German. 1.50

479-480 PB L 70150 Aminomethoxydiphenylene oxide. By Lanz. Dec 12, 1938. In German. 1.50

481 PB L 70150 Aminosulfophenylmethyltaurine. By Lanz. Apr 18, 1939. In German. 1.50

482 PB L 70150 Nitrosulfophenylmethyltaurine. By Lanz. Feb 24, 1939. In German. 1.50

483-484 PB L 70150 B-Acetic ester. (Condensation product from benzoylchloride and acetoacetic ester). By Lanz. Feb 18, 1937. In German. 1.50

485-486 PB L 70150 p-Chloronitroaniline. By Lanz. Feb 18, 1937. In German. 1.50

487 PB L 70150 "Chloro-ortho-toluidine acid." By Lanz. May 20, 1937. In German. 1.50

488-489 PB L 70150 Chlorophenylquinone. By Lanz. Dec 10, 1938. In German. 1.50

490-491 PB L 70150 Chlorodihydroxydiphenyl. By Lanz. Dec 10, 1938. In German. 1.50

492-493 PB L 70150 Chlorosulfobenzoic acid. By Lanz. Aug 12, 1937. In German. 1.50

751194 O—48——2—31

Dyes (contd)

494-495 PB L 70150 — m-Chlorotoluene. By Lanz. Sep 21, 1937. In German. 1.50

496-497 PB L 70150 — Diethylsulfate. By Lanz. Jul 19, 1940. In German. 1.50

498-499 PB L 70150 — m-Dichlorobenzene. By Lanz. Jan 31, 1941. In German. 1.50

500-501 PB L 70150 — Dimethylsulfate. By Lanz. Jan 18, 1941. In German. 1.50

502-503 PB L 70150 — Dinitroaniline (Dinitramine). By Lanz. Jun 8, 1937. In German. 1.50

504 PB L 70150 — Hydrobenzamide. By Lanz. May 19, 1937. In German. 1.50

505 PB L 70150 — Isophthaloyl chloride. By Lanz. Mar 17, 1939. In German. 1.50

506-507 PB L 70150 — "Metanilsalylsulfone." By Lanz. Feb 26, 1937. In German. 1.50

508-509 PB L 70150 — Nitromethoxydiphenylene oxide. By Lanz. Dec 12, 1938. In German. 1.50

510-511 PB L 70150 — Metanitrobenzaldehyde. By Lanz. May 19, 1937. In German. 1.50

512-513 PB L 70150 — Nitro-o-cresol. By Lanz. Sep 16, 1938. In German. 1.50

514 PB L 70150 — Nitro-o-cresolmethyl ether. (Nitro-ortho cresolmethyl 4). By Lanz and Waldmüller. Nov 10, 1938. In German. 1.50

515-517 PB L 70150 — p-Aminodiphenylamine (Phenylparamine). By Lanz. Jan 23, 1941. In German. 1.50

518-520 PB L 70150 — p-Chloro-nitro-benzotrifluoride (Nitro RD) and p-Chlor-amino-benzotrifluoride (RD-Base). By Lanz. 1937-1938. In German. 1.50

521-522 PB L 70150 — Sodium benzene sulfinate (S-Salt Bz). By Lanz. Mar 16, 1938. In German. 1.50

523 PB L 70150 — Pure sulfanilic acid. By Lanz. Mar 18, 1937. In German. 1.50

524 PB L 70150 — Terephthalic acid chloride. By Lanz. Nov 26, 1940. In German. 1.50

525-530 PB L 70150 — Aceto-acetic arylides. By Mengel. 1941. In German. 1.50

531-533 PB L 70150 — Diacetoacetic toluidide (Naphthol AS-G). By Mengel. Mar 26, 1941. In German. 1.50

534-535 PB L 70150 — Naphthol AS-LG. By Mengel. Dec 31, 1940. In German. 1.50

536-538 PB L 70150 — Naphthol AS-L30. By Mengel. Dec 21, 1940. In German. 1.50

539-555 PB L 70150 — 5-Chlor-2-toluidine. (Fast red TR pure base). By Hotz. 1934. In German. 2.00

556 PB L 70150 — 5-Chloro-2-toluidine-3-sulfonic acid and 3-chloro-2-toluidine-5-sulfonic acid. By Hotz. Sep 11, 1934. In German. 1.50

557-558 PB L 70150 — Chlorocresidine. By Hotz. Sep 11, 1934. In German. 1.50

559-570 PB L 70150 — Benzene distillation. By Hotz. Nov 15, 1934. In German. 1.50

571-583 PB L 70150 — Aniline. By Grom and Hotz. Aug 10, 1940. In German. 1.50

584-589 PB L 70150 — Benzene, toluene, xylene. By Hotz. Jan 16, 1935. In German. 1.50

590-594 PB L 70150 — Nitrobenzene. Aniline. (Analysis). By Hotz. Jan 15, 1935. In German. 1.50

PB L 70150-S. I. G. FARBENINDUSTRIE A. G., FRANKFURT AM MAIN, GERMANY. Organic preparations. (FIAT Microfilm Reel J-10, Frames 1-594, abstract cards). 1931-1941. 85 p. Price: Microfilm-$2.00 - Photostat-$6.00
Brief abstracts of the individual items on the above reel J 10, PB 70150, prepared by FIAT personnel in Germany.

Paints, Varnishes and Lacquers

* PB L 81622. HILLIER, G. M. and CLAY, H. F. Luminescent Pigments at I. G. Farbenindustrie, Leverkusen, and Riedel de Haen A. G. (BIOS Final Rept 1455, Item 22) n. d. 24 p. Price: Microfilm-$1.50 - Photostat-$3.00
This report makes no attempt to survey the full German production of luminescent pigments. The information obtained was incidental to the main investigation - the manufacture of inorganic pigments. However, as much data as possible regarding luminescent pigments was obtained and is presented in this report.

PB L 17656. I. G. FARBENINDUSTRIE A. G. Reports presented at meetings of the Lacquer Commission (Lack-Ko) and other reports on lacquers, varnishes, solvents and allied materials. 1933-1942. (FIAT Microfilm Reel C 59, Frames 1-1185) 1933-1942. 1355 f. Price: Microfilm-$6.00 - Enlargement print-$135.50
The individual items of this FIAT Microfilm Reel are listed below. They will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $6.00. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

PB Numbers Frames	Title	Price
L 65112 Frames 1-14B	NC-dyes - Combustibility of varnishes - New solvents, softeners and artificial resins since 1931. Apr. 1933. In German.	$2.00
L 65113 Frames 15-44	Soligens; NC-dyes; varnish raw materials; substitute for GR esters; isobutyl oils; "Alkydals"; polyvinyl resins; Mowilith; polyacrylic esters; KM-resin. Various laboratory reports. Nov 1933. In German.	2.00
L 65114 Frames 45-65	Varnish raw materials, solvents and solid varnish raw materials. Feb 1934. In German.	2.00
L 65115 Frames 66-73	Raw materials and aliphatic chemistry. Artificial resins; plastics; carbon black and pigment matters. Jul 1934. In German.	1.00
L 65116 Frames 74-90	Mowilith, "Albanol," "Alkydals" and varnish products. Apr 1935. In German.	2.00
L 65117 Frames 91-98	Emulsions for coating purposes - "Pergut," "Alkydals." Nov 1935. In German.	1.00
L 65118 Frames 99-113	Distribution and price policy. Some technical information about "Alkydal"; "Pergut"; "Vinoflex";	

alkylphenol resins; glycerogen; cellulose wool and nitrocellulose emulsions. Feb 1936. In German. 1.00

L 65119 Frames 114-124 — Distribution and price policy. Some technical information about "Alkydal"; "Pergut"; "Vinoflex"; alkylphenol resins; glycerogen; cellulose wool and nitrocellulose emulsions. Nov 1936. In German. 1.00

L 65120 Frames 125-134 — "Alkydals" and "L-Varnishes." Mar 1937. In German. 1.00

L 65121 Frames 135-166 — Emulsions from nitro-varnishes and chlorinated rubber solutions - "Alkydals." Nov 1937. In German. 3.00

L 65122 Frames 167-207 — Nitrocellulose emulsions; "Alkydals"; phenol resins; aluminum stearate; emulsions; "Lumitol"; new polymers. The Schamberger process. Jan 1939. In German. 3.00

L 65123 Frames 208-252 — Cellulose esters and ethers. May 1939. In German. 3.00

L 65124 Frames 253-319 — Comparison between polymers for varnishes and other binding agents - Polyvinylacetate emulsion; polyvinyl alcohol; "Pioloform"; "Pergut"; "Mowilith"; "Mowital"; "Vinoflex" types. Jun 1939. In German. 5.00

L 65125 Frames 320-353 — Substitutes for varnish raw materials and materials which may become important. Nov 1939. In German. 3.00

L 65126 Frames 354-384 — Development of new varnish raw materials in 1939/40. Jul 1940. In German. 2.00

L 65127 Frames 385-404 — Corrosion protection. Research on basic materials. Varnish raw materials in war and peace. Some new binding agents. Nov 1940. In German. 2.00

L 65128 Frames 405-422 — Oil-free emulsions in wall paints in chemical plants. Feb 1941. In German. 2.00

L 65129 Frames 423-488 — Special subjects. Nov 1942. In German. 5.00
Several frames are duplicated.

L 65130 Frames 489-496 — New results in the field of isocyanate lacquers. In German. 1.00

L 65131 Frames 497-504 — Urethane linseed oils. In German. 1.00

L 65132 Frames 505-511 — Production of synthetic drying oils. In German. 1.00

L 65133 Frames 512-536 — Condensation products of aromatic hydrocarbons with formaldehyde. In German. 2.00

L 65134 Frames 537-540 — Catalytic effect of dicarboxylic acids in the esterification of cellulose. In German. 1.00

L 65135 Frames 541-547 — Production of cellulose esters from mixed anhydrides. In German. 1.00

L 65136 Frames 548-553 — Progress in the field of cellite. In German. 1.00

L 65137 Frames 554-561 — Development of some important varnish products. In German. 1.00

L 65138 Frames 562-585 — Pre-war requirements and usage of natural varnish raw materials. (Market analysis.) In German. 2.00

L 65139 Frames 586-598 — Lacquer properties of urethane linseed oils. In German. 1.00

L 65140 Frames 599-604 — Varnishing properties of synthetic drying oils. In German. 1.00

L 65141 Frames 605-609 — Lacquer resins from formaldehyde condensation products. In Germ 1.00

L 65142 Frames 610-619 — Phenol acetylene resins. In German. 1.00

L 65143 Frames 620-628 — Cyclohexanone formaldehyde resins. In German. 1.00

L 65144 Frames 629-633 — Lacquer resins from hydroxyethylated carbonyl compounds. In German. 1.00

L 65145 Frames 634-648 — Recent experience in the production of artificial resins from benzylchloride and its homologs. In German. 1.00

L 65146 Frames 649-654 — Suitability of sulfamides as softeners for lacquer raw materials. In German. 1.00

L 86740 Frames 655-661 — Softeners and solvents from furfurole. In German. 2.00
Mostly illegible.

L 65147 Frames 662-663 — Catalyst hardening of condensation resins. In German. 1.00

L 65148 Frames 664-670 — Experiments on lacquering of wires with "Mowitals." In German. 1.00

L 65149 Frames 671-675 — Usability of emulsions of polymers in the lacquer field. In German 1.00

L 65150 Frames 676-691 — Influence of temperature and/or addition of water on the viscosity of NC-solutions. In German. 2.00

L 86745 Frames 692-708 — The lacquer program. Oven dried lacquers for war purposes (construction of chemical apparatus). "Demosit" and "Desophen." Emulsion technique. Nov 1942. In German. 3.00
Mostly illegible.

L 65151 Frames 709-735 — Conference held on Sept. 17/18, 1936. "On the raw materials for synthetic resins." In German. 2.00

L 65152 Frames 736-744 — Solvents for cellulose lacquers. In German. 1.00

L 65153 Frames 745-746 — Solvents for other compounds. In German. 1.00

L 65154 Frames 747-748 — Softeners. In German. 1.00

L 86746 Frames 749-751 — Nitrocellulose as raw material for lacquers. In German. 2.00
Illegible.

L 65156 Frames 752-759 — The economic and practical development of "Alkydals." In German. 1.00

L 65157 Frames 760-761 — Our "Alkydal" trade. In German. 1.00

L 65158 Frames 762-782 — The new thermoplastic synthetic products developed by I. G. In German. 2.00

L 65159 Frames 783-787 — "Membranit." In German. 1.00

L 65160 Frames 788-790 — Emulsion paints. In German. 1.00

L 65161 Frames 791-792 — Hard resins for the oil lacquer industry. In German. 1.00

L 65162 Frames 793-794 — New products. In German. 1.00

L 65163 Frames 795-796 — Protective paints for use on materials subjected to undue strain. In German. 1.00

L 65164 Frames 797-805 — "Albanol." In German. 1.00

L 65165 Frames 806-829 — Discussion on the report by Dr. Prillwitz. In German. 2.00

L 65166 Frames 830-831 — Drying substances. In German. 1.00

Frames 832-841 — These frames are duplicates of frames 1122-1127.

L 65167 Frames 842-843 — "Garopon," an artificial resin. In German. 1.00

L 65168 Frames 844-861 — "Mowilith," an artificial resin. In German. 2.00

Frames 861A-861J — These frames are duplicates of frames 1071-1089.

L 65169 Frames 862-870 — New products. In German. 1.00

L 86747 Frames 871-883 — Our "Alkydal" trade. In German. Not legible. 3.00

L 65170 Frames 884-894 — Protective paints for special purposes. In German. 1.00

L 65171 Frames 895-903 — Drying substances and other finishes. In German. 1.00

L 65172 Frames 904-909 — Main problems to date in the field of synthetic lacquers. In German. 1.00

L 65173 Frames 910-919 — Nitrocellulose emulsions. In German. 1.00

L 65174 Frames 920-925 — Information on the present status of "Alkydals." In German. 1.00

L 65175 Frames 926-929 — Experience with products now on the market. "Solvenol J." In German. 1.00

L 65176 Frames 930-939 — Report of the testing of plasticiser "MMA." In German. 1.00

L 65177 Frames 940-942 — Plasticiser "MMA" for triolins. In German. 1.00

L 65178 Frames 943-945 — Experiments for protecting packing materials by coating or painting. In German. 1.00

L 65179 Frames 946-961, 1056-1057 — Mowoliths; conference at Ludwigshafen, Sept. 1936. In German. 2.00

L 65180 Frames 962-963 — Drying agents. In German. 1.00

L 65181 Frames 964-971 — Discussion on the report by Dr. Prillwitz. In German. 1.00

L 65182 Frames 972-982 — "Albanol." Conference in Ludwigshafen, Sept. 1936. In German. 1.00

L 65183 Frames 983-984 — New products. In German. 1.00

Frames 985-986 — These frames are duplicates of frames 1081-1093.

Frames 987-989 — These frames are duplicates of frames 788-790.

Frames 990-994 — These frames are duplicates of frames 1112-1116.

Frames 995-1015 — These frames are duplicates of frames 762-782.

L 65184 Frames 1016-1017 — Our "Alkydal" trade. In German. 1.00

L 65185 Frames 1018-1025 — The scientific and practical development of the "Alkydals." In German. 1.00

L 65186 Frames 1026-1028 — Nitrocellulose as raw material for lacquers. In German. 1.00

L 65187 Frames 1029-1030 — A solvent for other compounds. In German. 1.00

L 65188 Frames 1031-1036 — Ethyl acetate 75%. In German. 1.00

L 65189 Frames 1037-1039 — Solvents for cellulose lacquers. In German. 1.00

L 65190 Frames 1040-1055 — Mowoliths. Conference in Sept. 1936. In German. 2.00

Frames 1056-1057 — See PB L 65179, above.

Frames 1058-1061 — These frames are duplicates of frames 788-790.

Frames 1062-1070 — These frames are duplicates of frames 972-982.

L 65191 Frames 1071-1080 — The technical development of raw materials for lacquers in the most important industrial countries. In German. 1.00

L 65192 Frames 1081-1093	Hard resins in the oil lacquer industry. In German.	1.00
L 65193 Frames 1094-1102	Drying substances and other finishes. In German.	1.00
L 65194 Frames 1103-1111	New products. In German.	1.00
L 65195 Frames 1112-1117	"Membranit." In German.	1.00
L 65196 Frames 1118-1121	On "Mowithals." In German.	1.00
L 65197 Frames 1122-1127	Ethyl acetate 70%. Conference in Sept. 1936. In German.	1.00
L 65198 Frames 1128-1131	On paints which register the temperature. In German.	1.00
L 65199 Frames 1132-1139	Polyvinyl-methyl ether for corrosive agents. In German.	1.00
L 65200 Frames 1140-1144	Polyvinyl-methyl ether for use in lacquers. In German.	1.00
L 65201 Frames 1145-1146	Aldol resin 260 as a substitute for natural shellac in rapid polishes. In German.	1.00
L 65202 Frames 1147-1157	The possibilities of substituting Oppanols and Igelits for rubber. In German.	1.00
L 65203 Frames 1158-1160	Polyvinyl-methyl ether as a binder in the adhesive paints industry; results of tests made at Uerdingen. In German.	1.00
L 65204 Frames 1161-1167	Re: polyvinyl ethers. In German.	1.00
L 65205 Frames 1168-1182	"Vinoflex." In German.	1.00
L 65206 Frame 1183	Polyvinyl ether. In German.	1.00
L 65207 Frames 1184-1185	Minutes of discussion on phenol-formaldehyde condensation products. In German.	1.00
L 65111	Reports presented at meetings of the Lacquer Commission (Lack-Ko and other reports on lacquers, varnishes, solvents and allied materials, 1933-1942). Index.	1.00

* PB L 81822. ROONEY, JOHN F. Utilization of tall oil in Germany. (FIAT Final Rept 1144) Jun 1947. 24 p. Price: Mimeo-75¢

This report covers the utilization of tall oil as a substitute for linseed oil and rosin in the surface coating and linoleum industries, as practiced by a representative group of manufacturers engaged in the above industries. The types of formulae contained in this report include alkyd resins, modified phenolic resins, tall oil esters, and linoleum paste, all standard production items of the firms investigated. A bibliography is attached.

Analytical Chemistry

PB L 17692. I. G. FARBENINDUSTRIE A. G. Analytical chemical methods. (FIAT Microfilm Reel C 113, Frames 1-1505) Feb 1946. 1505 f. Price: Microfilm-$6.00 - Enlargement print-$150.00

The 497 individual items on the FIAT microfilm reel are listed below. They will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $6.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

PB Numbers Frames	Title	Price
L 69128 Frames 1-5	Benzaldehyde-1-sulfonic acid. In German.	$1.00
L 69129 Frame 6	Tetramethyle-diaminodiphenylmethane. In German.	1.00
L 69130 Frames 7-13	Tetramethyl-diaminodiphenyl-carbinol. In German.	1.00
L 69131 Frames 14-15	Tetra-ethyl-diaminodiphenyl-carbinol. In German.	1.00
L 69132 Frames 16-18	Naphthalene-β-monosulfonic acid. In German.	1.00
L 69133 Frames 19-21	m-Hydroxybenzaldehyde. In German.	1.00
L 69134 Frames 22-25	3-Nitrobenzaldehyde. In German.	1.00
L 69135 Frames 26-31	1,8-Dihydroxynaphthalene-4-sulfonic acid. In German.	1.00
L 69136 Frames 32-34	1,3-Phenylenediamine-4-sulfonic acid. In German.	1.00
L 69137 Frames 35-37	2,4-Toluylenediamine-5-sulfonic acid. In German.	1.00
L 69138 Frames 38-42	2-Naphthol-6-sulfonic acid sodium salt. In German.	1.00
L 69139 Frames 43-45	2-Naphthol-8-sulfonic acid. In German.	1.00
L 69140 Frames 46-51	Method of diazotisation. In German.	1.00
L 69143 Frames 52-53	Reduction of nitro-hydrocarbons by means of iron and hydrochloric acid. In German.	1.00
L 69144 Frames 54-56	Acetic acid test for dialkylated anilines. In German.	1.00
L 69145 Frames 57-59	Ash determination in organic substances and determination of diluents in dyes. In German.	1.00
L 69146 Frames 60-87	Determination of metal poisons in dyes for foods. In German.	2.00

L 69147 Frames 88-92 — Determination of the hydroxyl group in alcohols and phenols. In German. 1.00

L 69148 Frame 93 — General saponification method for the quantitative analysis of esters. In German. 1.00

L 69149 Frame 94 — General methods for the determination of the constants of fats and oils. In German. 1.00

L 69150 Frames 95-104 — Analytical methods for solvents. In German. 1.00

L 69151 Frames 105-111 — Analysis of complex wetting agents. In German. 1.00

L 69141 Frames 112-114 — Determination of the solidification point of substances melting at a high temperature. In German. 1.00

L 69142 Frames 115-119 — Determination of the water. In German. 1.00

L 69152 Frames 120-129 — Simultaneous determination of metals in different stages of oxydation. In German. 1.00

L 69153 Frames 130-132 — 2-Nitrotoluene (o-nitrotoluene). In German. 1.00

L 69154 Frame 133 — 3-Nitrotoluene (m-nitrotoluene). In German. 1.00

L 69155 Frame 134 — 4-Nitrotoluene (p-nitrotoluene). In German. 1.00

L 69156 Frames 135-136 — Nitrotoluene, crude. In German. 1.00

L 69157 Frame 137 — Nitroxylene. In German. 1.00

L 69158 Frames 138-140 — 1-Nitro-naphthalene. In German. 1.00

L 69159 Frames 141-143 — 2-Toluidine (o-toluidine). In German. 1.00

L 69160 Frames 144-145 — 3-Toluidine (m-toluidine). In German. 1.00

L 69161 Frames 146-147 — 4-Toluidine (p-toluidine). In German. 1.00

L 69162 Frames 148-150 — Toluidine, crude. In German. 1.00

L 69163 Frames 151-154 — as,m-Xylidine. In German. 1.00

L 69164 Frames 155-157 — p-Xylidine. In German. 1.00

L 69165 Frames 158-164 — 1-Amino-8-naphthol-4,6-disulfonic acid. In German. 1.00

L 69166 Frames 165-168 — 1-Naphthylamine-3,8-disulfonic acid. In German. 1.00

L 69167 Frame 169 — 1-Naphthol-3,8-disulfonic acid. In German. 1.00

L 69168 Frames 170-175 — 2-Naphthylamine-5,7-disulfonic acid. In German. 1.00

L 69169 Frames 176-182 — 2-Naphthylamine-3,6-disulfonic acid. In German. 1.00

L 69170 Frames 183-184 — 2-Amino-3-naphthol-6-sulfonic acid. In German. 1.00

L 69171 Frames 185-188 — 1-Naphthylamine-5-sulfonic acid. In German. 1.00

L 69172 Frames 189-192 — 1-Naphthylamine-8-sulfonic acid. In German. 1.00

L 69173 Frames 193-198 — Salicylic acid. In German. 1.00

L 69174 Frames 199-204 — Benzaldehyde. In German. 1.00

L 69175 Frames 205-210 — Azobenzol. In German. 1.00

L 69176 Frames 211-214 — Aminoazotoluene. In German. 1.00

L 69177 Frames 215-225 — Determination of the nitro group. In German. 1.00

L 69178 Frames 226-227 — 1-2-Nitrochlorobenzene. In German. 1.00

L 69179 Frames 228-229 — 1-4-Nitrochlorobenzene. In German. 1.00

L 69180 Frames 230-231 — 2-Nitro-1,4-dichlorobenzene. In German. 1.00

L 69181 Frames 232-233 — 2,4-Dinitrotoluene. In German. 1.00

L 69182 Frames 234-236 — 4-Nitrochlorobenzene-2-sulfonic acid. In German. 1.00

L 69183 Frames 237-238 — 2-Nitrochlorobenzene-4-sulfonic acid. In German. 1.00

L 69184 Frames 239-241 — 4-Nitrotoluene-2-sulfonic acid. In German. 1.00

L 69185 Frame 242 — 2-Nitrotoluene-4-sulfonic acid. In German. 1.00

L 69186 Frames 243-244 — 2,4-Dinitrotoluene-6-sulfonic acid. In German. 1.00

L 69187 Frames 245-246 — 2,6-Dinitrotoluene-4-sulfonic acid. In German. 1.00

L 69188 Frames 247-249 — 2-Nitraniline (o-nitraniline). In German. 1.00

Analytical Chemistry (contd)

L 69189 Frames 250-252 — 3-Nitraniline (m-nitraniline). In German. 1.00

L 69190 Frames 253-256 — 4-Nitroacetanilide. In German. 1.00

L 69191 Frames 257-258 — 1-Naphthol-5-sulfonic acid. In German. 1.00

L 69192 Frames 259-263 — Benzylchloride and benzoylchloride. In German. 1.00

L 69193 Frames 264-265 — 2-Naphthylamine 3,6,8-trisulfonic acid. In German. 1.00

L 69194 Frames 266-271 — 2-Amino-8-naphthol-3,6-disulfonic acid. In German. 1.00

L 69195 Frames 272-277 — Manganese dioxide (pyrolusite). In German. 1.00

L 69196 Frames 278-281 — Lead dioxide (lead peroxide). In German. 1.00

L 69197 Frames 282-287 — Zinc powder. In German. 1.00

L 69198 Frames 288-291 — Iron for reduction purposes. In German. 1.00

L 69199 Frames 292-294 — 2,3-hydroxynaphthoic acid (B-hydroxy naphthoic acid). In German. 1.00

L 69200 Frames 295-297 — Acetic anhydride. In German. 1.00

L 67548 Frames 298-300 — 2-Sulfanilic acid. In German. 1.00

L 69201 Frames 301-302 — Benzidine hydrochloric acid salt. In German. 1.00

L 69202 Frame 303 — Tolidine (free base). In German. 1.00

L 69203 Frames 304-305 — Tolidine hydrochloric acid salt and sulfuric acid salt. In German. 1.00

L 69204 Frames 306-307 — Dianisidine. In German. 1.00

L 69205 Frame 308 — Dianisidine (hydrochloric acid salt. In German. 1.00

L 69206 Frames 309-314 — 1-Naphthylamine-4,8-disulfonic acid. In German. 1.00

L 69207 Frames 315-319 — Appendix to analyses 1-76. In German. 1.00

L 69208 Frames 320-322 — 2-Naphthylamine-4,8-disulfonic acid. In German. 1.00

L 69209 Frames 323-325 — 1-Phenylaminonaphthalene-8-sulfonic acid. In German. 1.00

L 69210 Frames 326-328 — 1-Tolylaminonaphthalene-8-sulfonic acid. In German. 1.00

L 69211 Frames 329-331 — "Freund's acids." In German. 1.00

L 69212 Frames 332-335 — Monomethylaniline. In German. 1.00

L 69213 Frames 336-340 — Mono-ethylaniline. In German. 1.00

L 86529 Frames 341-343 — Monomethyl-o-toluidine. In German. 2.00

L 86530 Frames 344-346 — Mono-ethyl-o-toluidine. In German. 2.00

L 86531 Frames 347-350 — Mono-benzyl-o-toluidine. In German. 2.00

L 69214 Frames 351-352 — Dimethylaniline. In German. 1.00

L 86532 Frames 353-354 — Diethylaniline. In German. In parts difficult to read. 2.00

L 86533 Frames 355-356 — Dimethyl-o-toluidine. In German. In parts difficult to read. 2.00

L 69215 Frames 357-358 — Diethyl-o-toluidine. In German. 1.00

L 69216 Frames 359-360 — Dibenzylaniline. In German. 1.00

L 69217 Frames 361-362 — Methylbenzylaniline. In German. 1.00

L 69218 Frames 363-365 — Ethylbenzylaniline. In German. 1.00

L 69219 Frames 366-374 — Ethylbenzylanilinemonosulfonic acid. In German. 1.00

L 69220 Frames 375-377 — Nitrosodimethylaniline. In German. 1.00

L 69221 Frame 378 — Nitrosodiethylaniline. In German. 1.00

L 69222 Frame 379 — 5-Nitroso-2-methyltoluidine. In German. 1.00

L 69223 Frames 380-381 — Nitrosomethylbenzylanilinesulfonic acid. In German. 1.00

L 69224 Frames 382-384 — Nitroso-B-naphthol. In German. 1.00

L 69225 Frame 385-388 — Nitroso-B-naphthol-bisulfite. In German. 1.00

L 69226 Frame 389 — 4-Aminodimethylaniline. In German. 1.00

L 69227 Frames 390-392 — Acetessigester acetic ester. In German. 1.00

L 86534 Frames 393-396 — 2-Chlorobenzaldehyde. In German. In parts difficult to read. 2.00

L 86535 Frames 397-398 — 2-Nitro-benzaldehyde. In German. In parts difficult to read. 2.00

69228 Frames 399-400 — 4-Nitrobenzaldehyde. In German. 1.00

L 86536 Frames 401-404 — 2- and 3-Nitrobenzaldehyde. In German. In parts difficult to read. 2.00

L 86537 Frames 405-408 — 3-Aminobenzaldehyde. In German. In parts difficult to read. 2.00

L 69229 Frames 409-413 — 4-Aminobenzaldehyde. In German. 1.00

L 69230 Frame 414 — 1-Amino-2-naphthol-4-sulfonic acid. In German. 1.00

L 69231 Frames 415-416 — 4-Aminoacetanilide. In German. 1.00

L 69232 Frames 417-418 — 4-Acetyltoluidine. In German. 1.00

L 69233 Frames 419-421 — 3-Nitro-4-acetyltoluidine. In German. 1.00

L 69234 Frames 422-423 — 3-Nitro-4-toluidine. In German. 1.00

L 69235 Frames 424-425 — 1-Naphthylamine-2-sulfonic acid. In German. 1.00

L 69236 Frame 426 — 1-Naphthylamine-3-sulfonic acid. In German. 1.00

L 69237 Frames 427-429 — 2-Naphthylamine-6,8-sulfonic acid. In German. 1.00

L 69238 Frames 430-431 — 2-Naphthylamine-1-sulfonic acid. In German. 1.00

L 69239 Frames 432-436 — 2-Naphthylamine-5-, 6-, 7-, and 8-sulfonic acid. In German. 1.00

L 69240 Frames 437-441 — 2-Naphthylamine-6-sulfonic acid. In German. 1.00

L 69241 Frames 442-446 — 2-Naphthylamine-7-sulfonic acid. In German. 1.00

L 69242 Frames 447-448 — 2-Naphthylamine-5-sulfonic acid. In German. 1.00

L 69243 Frames 449-450 — 2-Naphthylamine-8-sulfonic acid. In German. 1.00

L 69244 Frames 451-453 — 4-Nitro-2-aminophenol. In German. 1.00

L 69245 Frame 454 — 1-Acetylaminonaphthalene-6-sulfonic acid. In German. 1.00

L 69246 Frame 455 — Acetylaminonaphthalene-7-sulfonic acid. In German. 1.00

L 69247 Frames 456-458 — 4-Nitro-1-acetylaminonaphthalene-6-sulfonic acid. In German. 1.00

L 69248 Frames 459-461 — 4-Nitro-1-acetylaminonaphthalene-7-sulfonic acid. In German. 1.00

L 69249 Frames 462-463 — Monoacetyl-4-aminonaphthalene-6-sulfonic acid. In German. 1.00

L 69250 Frames 464-465 — Monoacetyl-1,4-diaminonaphthalene-7-sulfonic acid. In German. 1.00

L 69251 Frame 466 — Chlorobenzene. In German. 1.00

L 69252 Frames 467-468 — 1,2-Dichlorobenzene. In German. 1.00

L 69253 Frame 469 — 1,4-Dichlorobenzene. In German. 1.00

L 69254 Frames 470-472 — Phenol. In German. 1.00

L 69255 Frames 473-474 — Sodium phenate. In German. 1.00

L 69256 Frames 475-480 — 2-Chlorophenol, 4-chlorophenol, 2,4-dichlorophenol. In German. 1.00

L 69257 Frames 481-482 — 2-Nitrophenol. In German. 1.00

L 69258 Frames 483-487 — 4-Nitrophenol. In German. 1.00

L 69259 Frames 488-489 — 2,4,6-Trinitrophenol. In German. 1.00

L 69260 Frames 490-491 — 4-Chloro-2-nitrophenol. In German. 1.00

L 69261 Frame 492 — 2,6-Dichloro-4-nitrophenol. In German. 1.00

L 69262 Frames 493-494 — 4-Chloro-2,6-dinitrophenol. In German. 1.00

L 69263 Frames 495-496 — 6-Chloro-2-4-dinitrophenol. In German. 1.00

L 69264 Frames 497-499 — 2-Nitroanisole. In German. 1.00

L 69265 Frames 500-501 — 2,4-Dinitroanisole. In German. 1.00

L 69266 Frames 502-503 — 4-Nitrophenetole. In German. 1.00

L 69267 Frames 504-505 — 6-Nitro-2-aminophenol-4-sulfonic acid. In German. 1.00

L 69268 Frames 506-507 — 2-Amino-4-chlorophenol-6-sulfonic acid. In German. 1.00

L 69269 Frames 508-511 — Phenylhydrazine-4-sulfonic acid. In German. 1.00

L 69270 Frames 512-516 — 2-Chlorophenylhydrazine-4-sulfonic-acid. In German. 1.00

L 68007 Frames 517-518 — 2-Chlorophenyl methylpyrazolone-4-sulfonic acid. In German. 1.00

L 69271 Frames 519-520 — 2-Chlorophenyl-methylpyrazolone-5-sulfonic acid. In German. 1.00

L 69272 Frames 521-527 — 2,6-Dinitrochlorobenzene-4-sulfonic acid. In German. 1.00

L 69273 Frames 528-529 — 2-Phenylamino-5-naphthol-7-sulfonic acid. In German. 1.00

L 69274 Frames 530-531 — 2-Phenylamino-8-naphthol-6-sulfonic acid. In German. 1.00

L 69275 Frames 532-534 — Dehydrothiotoluidine. In German. 1.00

L 69276 Frames 535-537 — Dehydrothio-p-toluidine monosulfonic acid. In German. 1.00

L 69277 Frames 538-541 — Primulin. In German. 1.00

L 69278 Frames 542-543 — Diphenylamine. In German. 1.00

L 69279 Frames 544-545 — Sodium dihydroxytartarate. In German. 1.00

L 69280 Frames 546-547 — p-Toluene-sulfochloride. In German. 1.00

L 69281 Frames 548-551 — Methanol. In German. 1.00

L 69283 Frames 552-554 — Methylchloride. In German. 1.00

L 69284 Frames 555-558 — Acetone. In German. 1.00

L 69285 Frames 559-561 — Xylene. In German. 1.00

L 69286 Frames 562-573 — Acetic acid. In German. 1.00

L 69287 Frames 574-576 — Cresol, crude. In German 1.00

L 69288 Frames 577-578 — 2-Cresol. In German. 1.00

L 69289 Frames 579-580 — 3-Cresol. In German. 1.00

L 69290 Frame 581 — 4-Cresol. In German. 1.00

L 69291 Frame 582 — 3-Nitro-4-cresol. In German. 1.00

L 69292 Frame 583 — 3-Nitro-4-cresolmethylether. In German. 1.00

L 69293 Frames 583A-584 — Guaiacol. In German. 1.00

L 69294 Frames 585-588 — Determination of phenol and pyrocatechol in resorcinol. In German. 1.00

L 69295 Frame 589 — Hydrochinone. In German. 1.00

L 69296 Frames 590-591 — Pyrogallol. In German. 1.00

L 69297 Frames 592-594 — 2,4-Dinitraniline. In German. 1.00

69298 Frames 595-596 — 4-Nitro-3-phenylenediamine. In German. 1.00

L 69299 Frames 597-598 — 3-Nitro-4-aminoacetanilide. In German. 1.00

L 69300 Frames 599-600 — 2,6-Toluylenediamine. In German. 1.00

L 69301 Frames 601-602 — 2,6-Toluylenediamine-4-sulfonic acid. In German. 1.00

L 69302 Frames 603-604 — 1,4-Phenylenediamine. In German. 1.00

L 69303 Frames 605-608 — Sulfonation of naphthalene to form 2, 6- and 2,7-disulfonic acid. In German. 1.00

L 69304 Frames 609-611 — Naphthalene sodium-2,6-disulfonate. In German. 1.00

L 69305 Frames 612-614 — Naphthalene sodium-2,7-disulfonate. In German. 1.00

L 69306 Frames 615-618 — Ethyl-α-naphthylamine. In German. 1.00

L 69307 Frames 619-620 — Diethyl-α-naphthylamine. In German. 1.00

L 69308 Frames 621-624 — Phenyl-β-naphthylamine. In German. 1.00

L 69309 Frames 625-628 — Ethyl-β-naphthylamine. In German. 1.00

L 69310 — Phthalic anhydride. In German. 1.00

751194 O—48——3—31

Analytical Chemistry (contd)

Frames 629-630

L 69311 Frames 631-634 — Benzoic acid. In German. 1.00

L 69312 Frames 635-637 — Sodium benzoate. In German. 1.00

L 69313 Frames 638-639 — 2-Aminosalicylic acid. In German. 1.00

L 69314 Frames 640-642 — 4-Aminosalicylic acid. In German. 1.00

L 69315 Frames 643-645 — 2-Nitranilins-4-sulfonic acid. In German. 1.00

L 69316 Frames 646-649 — 1-Amino-naphthalene-3.6.8-trisulfonic acid. In German. 1.00

L 69317 Frames 650-653 — 1-Amino-naphthalene-4.6.8-trisulfonic acid. In German. 1.00

L 69318 Frames 654-656 — 1-Naphthylsulfaminic acid. In German. 1.00

L 69319 Frames 657-659 — Aminoazobenzolmonosulfonic acid. In German. 1.00

L 69320 Frames 660-661 — Aminoazobenzoldisulfonic acid. In German. 1.00

L 69321 Frames 662-666 — Nitro-1-diazo-2-naphthol-4-sulfonic acid. In German. 1.00

L 69322 Frames 667-668 — Quinaldine. In German. 1.00

L 69323 Frames 669-673 — Monochloroacetic acid. In German. 1.00

L 69324 Frame 674 — Phosphortrichloride. In German. 1.00

L 69325 Frames 675-687 — Sodium sulfide. In German. 1.00

L 69326 Frames 688-689 — 2-Chlorotoluene. In German. 1.00

L 69327 Frame 690 — 4-Chlorotoluene. In German. 1.00

L 29328 Frames 691-692 — 2.6-Dichloro-4-nitroaniline. In German. 1.00

L 69329 Frames 693-695 — Acetanilide. In German. 1.00

L 69330 Frames 696-697 — 2-Chloroaniline. In German. 1.00

L 69331 Frames 698-700 — 4-Chloroaniline. In German. 1.00

L 69332 Frames 701-702 — 2.5-Dichloroaniline. In German. 1.00

L 69282 Frames 703-704 — 2-Aminophenol. In German. 1.00

L 69333 Frame 705 — 3-Aminophenol. In German. 1.00

L 69334 Frames 706-707 — 4-Chloro-2-aminophenol. In German. 1.00

L 69335 Frames 708-709 — 5-Nitro-2-aminophenol. In German. 1.00

L 69336 Frames 710-711 — 4.6-Dinitro-2-aminophenol. In German. 1.00

L 69337 Frames 712-713 — 2-Anisidine. In German. 1.00

L 69338 Frames 714-715 — 4-Phenetidine. In German. 1.00

L 69339 Frames 716-717 — 2.6-Dichloro-4-aminophenol. In German. 1.00

L 69340 Frames 718-719 — 1.5-Naphthylenediamine. In German. 1.00

L 69341 Frames 720-722 — 1.8-Naphthylenediamine. In German. 1.00

L 69342 Frames 723-724 — 1.5-Naphthylenediamine-3.7-disulfonic acid. In German. 1.00

L 69343 Frame 725 — 1.8-Naphthylenediamine-4-sulfonic acid. In German. 1.00

L 69344 Frames 726-727 — 1.8-Naphthylenediamine-3.6-disulfonic acid. In German. 1.00

L 69345 Frames 728-731 — Formaldehyde. In German. 1.00

L 69346 Frames 732-737 — Hydrosulfite and sulfoxylate. In German. 1.00

L 69347 Frame 738 — Benzoquinone. In German. 1.00

L 69348 Frames 739-741 — 1.2-Naphthoquinone. In German. 1.00

L 69349 Frames 742-746 — Ethylchloride. In German. 1.00

L 69350 Frames 747-748 — 2-Acetyltoluidine. In German. 1.00

L 69351 Frames 749-752 — 4.4'Dinitrostilbene-2.2'-disulfonic acid. In German. 1.00

L 69352 Frames 753-755 — 4.4'Diaminostilbene-2.2'-disulfonic acid. In German. 1.00

L 69353 Frames 756-758 — 1,5-Dinitronaphthalene. In German. 1.00

L 69354 Frames 759-760 — 1,8-Dinitronaphthalene. In German. 1.00

L 69355 Frames 761-763 — 2-Naphthol-7-sulfonic acid. In German. 1.00

L 69356 Frames 764-765 — Mixture of β-naphthol-7-sulfonic acid + α-naphthol. In German. 1.00

L 69357 Frames 766-767 — α-Naphthol-3,6-disulfonic acid. In German. 1.00

L 69358 Frames 768-769 — 1,8-Naphthsultam-2,4-disulfonic acid. In German. 1.00

L 69359 Frames 770-771 — 4-Nitrosophenol. In German. 1.00

L 69360 Frames 772-773 — 4-Aminodiphenylamine. In German. 1.00

L 69361 Frames 774-775 — 4-Aminodiphenylamine-2-sulfonic acid. In German. 1.00

L 69362 Frames 776-777 — 4,4'Diaminodiphenylamine. In German. 1.00

L 69363 Frames 778-780 — 4,4'Diaminodiphenylamine-2-sulfonic acid. In German. 1.00

L 69364 Frames 781-783 — Naphthalene-1,5-disulfonic acid. In German. 1.00

L 69365 Frames 784-786 — Naphthalene-1,6-disulfonic acid. In German. 1.00

L 69366 Frames 787-788 — 3,3' Dichlorobenzidine. In German. 1.00

L 69367 Frames 789-790 — 4-Chloro-2-nitroaniline. In German. 1.00

L 69368 Frames 791-792 — 2-Chloro-4-nitroaniline. In German. 1.00

L 69369 Frames 793-794 — 4-Nitro-2-anisidine. In German. 1.00

L 69370 Frames 795-795A — 5-Nitro-2-anisidine. In German. 1.00

L 69371 Frames 796-797 — 4-Chloro-2-anisidine. In German. 1.00

L 69372 Frames 798-799 — Benzidinemonosulfonic acid. In German. 1.00

L 69373 Frames 800-802 — Benzidinedisulfonic acid. In German. 1.00

L 69374 Frames 803-806 — Aniline-3,6-disulfonic acid. In German. 1.00

L 69375 Frames 807-808 — Aniline-2,4-disulfonic acid. In German. 1.00

L 69376 Frames 809-810 — Phenacetine. In German. 1.00

L 69377 Frames 811-812 — Chloranil. In German. 1.00

L 69378 Frames 813-814 — α-Methylindole. In German. 1.00

L 69379 Frame 815 — 3-Amino-4-cresol. In German. 1.00

L 69380 Frame 816 — Cyclohexanone. In German. 1.00

L 69381 Frame 816 — Methylcyclohexanone. In German. 1.00

L 69382 Frames 818-819 — m-Nitrobenzene sulfonic acid. In German. 1.00

L 69383 Frames 820-821 — o-Cresotic acid. In German. 1.00

L 69384 Frames 822-823 — p-Cresotic acid. In German. 1.00

L 69385 Frame 824 — Diaminodiphenylmethane. In German. 1.00

L 69386 Frame 825 — Diaminotriphenylmethane. In German. 1.00

L 69387 Frame 826 — Diaminoditolylmethane. In German. 1.00

L 69388 Frames 827-829 — Dimethyl-α-naphthylamine. In German. 1.00

L 69389 Frames 830-831 — 1,3-Phenylenediamine-4,6-disulfonic acid. In German. 1.00

L 69390 Frames 832-834 — Dimethylsulfate. In German. 1.00

L 69391 Frames 835-836 — Urea of 2-amino-5-naphthol-7-sulfonic acid. In German. 1.00

L 69392 Frames 837-839 — Oleum. Sulfur trioxide. In German. 1.00

L 69393 Frames 840-842 — Monohydrate. In German. 1.00

L 69394 Frames 843-847 — Concentrated sulfuric acid, 98% and 66°. In German. 1.00

L 69395 Frames 848-855 — Dilute sulfuric acid and acid for storage batteries. In German. 1.00

L 69396 Frames 856-861 — Iron pyrites and burnt ore. In German. 1.00

Analytical Chemistry (contd)

L 69397 Frame 862 — Cement copper. In German. 1.00

L 69398 Frames 863-864 — Nitric acid. In German. 1.00

L 69399 Frames 865-866 — Mixed acid (mixture of nitric acid and sulfuric acid). In German. 1.00

L 69400 Frames 867-871 — Rock salt, sodium chloride. In German. 1.00

L 69401 Frames 872-875 — Hydrochloric acid. In German. 1.00

L 69402 Frames 876-877 — Sulfate. In German. 1.00

L 69403 Frames 878-881 — Sodium hydroxide. In German. 1.00

L 69404 Frames 882-886 — Soda / sodiumcarbonate. In German. 1.00

L 69405 Frames 887-889 — Chlorosulfonic acid. In German. 1.00

L 69406 Frame 890 — Methylenechloride. In German. 1.00

L 69407 Frames 891-893 — Chloroform. In German. 1.00

L 69408 Frames 894-897 — Carbon tetrachloride. In German. 1.00

L 69409 Frames 898-900 — Ethylalcohol. In German. 1.00

L 69410 Frames 901-903 — Butylalcohol. In German. 1.00

L 69411 Frames 904-905 — Glycol. In German. 1.00

L 69412 Frames 906-911 — Glycerol. In German. 1.00

L 69413 Frames 912-915 — Acetylchloride. In German. 1.00

L 69414 Frames 916-917 — Ethyl ether. In German 1.00

Frames 918-922 — These frames are missing.

L 69415 Frame 923 — Amylacetate. In German. 1.00

L 69416 Frame 924 — "Solventnaphta". In German. 1.00

L 69417 Frame 925 — Acetophenone. In German. 1.00

L 69418 Frames 926-928 — 2-Aminobenzoic acid. In German. 1.00

L 69419 Frames 929-930 — 4-Aminobenzoic acid. In German. 1.00

L 69420 Frames 931-933 — 4-Chloroaniline-2-sulfonic acid. In German. 1.00

L 69421 Frames 934-936 — 4-Chloroaniline-3-sulfonic acid. In German. 1.00

L 69422 Frames 937-938 — 2-Toluidinechlorohydrate. In German. 1.00

L 69423 Frame 939 — 3-Nitrochlorobenzene. In German. 1.00

L 69424 Frame 940 — 3-Chloroaniline. In German. 1.00

L 69425 Frames 941-942 — 2-Chloro-1.4-phenylenediamine. In German. 1.00

L 69426 Frames 943-944 — 3-Nitrobenzoic acid. In German. 1.00

L 69427 Frames 945-947 — 3-Nitrobenzoylchloride. In German. 1.00

L 69428 Frames 948-949 — 4-Nitrobenzoic acid. In German. 1.00

L 69429 Frames 950-952 — 4-Nitrobenzoylchloride. In German. 1.00

L 69430 Frames 953-955 — 6-Nitro-4-chloro-2-aminophenol. In German. 1.00

L 69431 Frame 956 — 3.4-Dichloronitrobenzene. In German. 1.00

L 69432 Frame 957 — 3.4-Dichloroaniline. In German. 1.00

L 69433 Frame 958 — 1-Amino-5-naphthol. In German. 1.00

L 69434 Frames 959-961 — Chromium ore. In German. 1.00

L 69435 Frames 962-963 — Potassium dichromate. In German. 1.00

L 69436 Frames 964-969 — Fluorite. In German. 1.00

L 69437 Frames 970-971 — Hydrofluoric acid. In German. 1.00

L 69438 Frames 972-975 — Sodium fluoride. In German. 1.00

L 69439 Frames 976-978 — Calcium carbide. In German. 1.00

L 69440 Frames 979-980 — Potassiumpermanganate. In German. 1.00

L 69441 Frames 981-995 — Phosphorite. In German. 1.00

L 69442 Frames 996-997 — Sulfuryl chloride. In German. 1.00

L 69443 Frames 998-1001 — Thionyl chloride. In German. 1.00

L 69444 Frames 1002-1006 — Sulfur. In German. 1.00

L 69445 Frames 1007-1014 — Zinc oxide, zinc chloride, zinc liquor. In German. 1.00

L 69446 Frame 1015 — Sulfur chloride. In German. 1.00

L 69447 Frames 1016-1019 — Butadiene. In German. 1.00

L 69448 Frames 1020-1021 — Sodium methylsulfate. In German. 1.00

L 69449 Frames 1022-1023 — Sodium ethylsulfate. In German. 1.00

L 69450 Frames 1024-1028 — Methylamine. In German. 1.00

L 69451 Frames 1029-1031 — Sodium acetate. In German. 1.00

L 69452 Frames 1032-1033 — Acetaldehyde. In German. 1.00

L 69453 Frames 1034-1036 — Oxalylchloride. In German. 1.00

L 69454 Frame 1037 — Acetamide. In German. 1.00

L 69455 Frames 1038-1042 — 3-Monomethyltoluidine. In German. 1.00

L 69456 Frames 1043-1045 — 4-Monomethyltoluidine. In German. 1.00

L 69457 Frames 1046-1050 — 3-Monoethyltoluidine. In German. 1.00

L 69458 Frames 1051-1053 — 4-Monoethyltoluidine. In German. 1.00

L 69459 Frames 1054-1056 — 3-Dimethyltoluidine. In German. 1.00

L 69460 Frames 1057-1059 — 4-Dimethyltoluidine. In German. 1.00

L 69461 Frames 1060-1062 — 3-Diethyltoluidine. In German. 1.00

L 69462 Frames 1063-1065 — 4-Diethyltoluidine. In German. 1.00

L 69463 Frames 1066-1069 — 3-Ethylbenzyltoluidine. In German. 1.00

L 69464 Frames 1070-1072 — 4-Ethylbenzyltoluidine. In German. 1.00

L 69465 Frame 1073 — 4-Chloro-2-toluidine. In German. 1.00

L 69466 Frames 1074-1076 — 5-Chloro-2-toluidine. In German. 1.00

L 69467 Frames 1077-1078 — 2-Chloro-4-toluidine. In German. 1.00

L 69468 Frames 1079-1080 — 2-Chloro-4-toluidine-5-sulfonic acid. In German. 1.00

L 69469 Frame 1081 — 2-Toluidine-4-sulfonic acid. In German. 1.00

L 69470 Frames 1082-1083 — 2-Toluidine-5-sulfonic acid. In German. 1.00

L 69471 Frame 1084 — 2,4-Dichlorotoluene. In German. 1.00

L 69472 Frame 1085 — 3,4-Dichlorotoluene. In German. 1.00

L 69473 Frame 1086 — 1,2,3 -Trichlorobenzene. In German. 1.00

L 69474 Frame 1087 — 1,2,4 -Trichlorobenzene. In German. 1.00

L 69475 Frame 1088 — 2-Xylene. In German. 1.00

L 69476 Frames 1089-1090 — 3-Xylene. In German. 1.00

L 69477 Frame 1091 — 4-Xylene. In German. 1.00

L 69478 Frame 1092 — 2-Chloro-4-Xylene. In German. 1.00

L 69479 Frame 1093 — 2,8-Dihydroxynaphtalenesulfonic acid. In German. 1.00

L 69480 Frames 1094-1097 — Anthracene. In German. 1.00

L 69481 Frame 1098 — Anthraquinone. In German. 1.00

L 69482 Frames 1099-1103 — Carbazole. In German. 1.00

Analytical Chemistry (contd)

L 69483 Frames 1104-1106 Pyridine. In German. 1.00

L 69484 Frame 1107 Dihydroxyquinoline. In German. 1.00

L 69485 Frame 1108 1-Phenyl-3-methyl-5-pyrazolone. In German. 1.00

L 69486 Frames 1109-1110 Isatin. In German. 1.00

L 69487 Frames 1111-1112 5,7-Dichloroisatin. In German. 1.00

L 69488 Frames 1113-1115 5,7-Dibromoisatin. In German. 1.00

L 69489 Frames 1116-1121 Chloride of lime. In German. 1.00

L 69490 Frames 1122-1127 Hypochloride of sodium or potassium. In German. 1.00

L 69491 Frames 1128-1131 Formic acid and sodium formate. In German. 1.00

L 69492 Frames 1132-1134 Crotonaldehyde. In German. 1.00

L 68083 Frame 1135 Castor oil. In German. 1.00

L 69493 Frames 1136-1138 Turkey-red oil. In German. 1.00

L 69494 Frames 1139-1142 Monomethylamine, dimethylamine and trimethylamine. In German. 1.00

L 69495 Frames 1143-1155 Monoethylamine, diethylamine and triethylamine. In German. 1.00

L 69496 Frames 1156-1157 4-Nitro-2-toluidine. In German. 1.00

L 6949? Frames 1158-1161 4,4-Diformylphenylenediamine. In German. 1.00

L 69498 Frames 1162-1164 Diacetyl-1,4-phenylenediamine. In German. 1.00

L 69499 Frame 1165 Nitrosalicylic acid. In German. 1.00

L 69500 Frame 1166 Diazosalicylic acid. In German. 1.00

L 69501 Frames 1167-1168 m-Xylidinesulfonic acid. In German. 1.00

L 69502 Frames 1169-1173 Gallic acid. In German. 1.00

L 69503 Frames 1174-1176 2,4-Dinitroacetanilide. In German. 1.00

L 69504 Frames 1177-1177A Benzylaniline. In German. 1.00

L 69505 Frames 1178-1179 Methyldiphenylamine. In German. 1.00

L 69506 Frames 1180-1181 2,5-Toluylenediamine. In German. 1.00

L 69507 Frames 1182-1185 Phenylhydrazine-2-sulfonic acid. In German. 1.00

L 69508 Frames 1186-1187 Pseudo-cumidine. In German. 1.00

L 69509 Frames 1188-1189 1-Acetylamino-8-hydroxynaphthalene-3,6-disulfonic acid. In German. 1.00

L 69510 Frames 1190-1191 1-Amino-2-naphtholether-6-sulfonic acid. In German. 1.00

L 69511 Frames 1192-1193 1-Naphthol-3,6,8-trisulfonic acid. In German. 1.00

L 69512 Frames 1194-1195 2-Naphthol-3,6,8-trisulfonic acid. In German. 1.00

L 69513 Frames 1196-1197 Primulinsulfonic acid. In German. 1.00

L 69514 Frames 1198-1201 Imidazole-1-acid. In German. 1.00

L 69515 Frames 1202-1206 Dextrin. In German. 1.00

L 69516 Frames 1207-1210 Potassium carbonate. In German. 1.00

L 69517 Frames 1211-1223 Potassium hydroxide / Caustic potash and potassium hydroxide solution. In German. 1.00

L 69518 Frames 1224-1227 Potassium chloride. In German. 1.00

L 69519 Frames 1228-1231 Potassium chlorate. In German. 1.00

L 69520 Frames 1232-1234 Sodium chlorate. In German. 1.00

L 69521 Frames 1235-1240 Sodium phosphotungston-molybdate. In German. 1.00

L 69522 Frames 1241-1245 Phosgene. In German. 1.00

L 69523 Frames 1246-1248 Sodium amide. In German. 1.00

L 69524 Frames 1249-1252 Ethylenoxide. In German. 1.00

L 69525 Frames 1253-1254 Formyl-1,3-phenylenediamine. In German. 1.00

L 69526 Frames 1255-1256 — Diformyl-1,3-phenylenediamine. In German. 1.00

L 69527 Frames 1257-1258 — 4-Nitroanisole. In German. 1.00

L 69528 Frames 1259-1262 — 4-Anisidine. In German. 1.00

L 69529 Frames 1263-1265 — Sodium benzene monosulfonate. In German. 1.00

L 69530 Frames 1266-1271 — Sodium-benzene-1,3-disulfonate. In German. 1.00

L 69531 Frames 1272-1275 — Benzonitrile. In German. 1.00

L 69532 Frames 1276-1277 — Benzenesulfochloride. In German. 1.00

L 69533 Frames 1278-1280 — (mono) Benzylaniline-4-sulfonic acid. In German. 1.00

L 69534 Frames 1281-1283 — Methylester of salicylic acid. In German. 1.00

L 69535 Frames 1284-1286 — 1,4-Phenylenediamine-2-sulfonic acid. In German. 1.00

L 69536 Frames 1287-1288 — Cyclohexylamine. In German. 1.00

L 69537 Frames 1289-1290 — 2-Chloro-1-naphthylamine. In German. 1.00

L 69538 Frames 1291-1292 — 3'-Nitrobenzoyl-2-amido-5-naphthol-7-sulfonic acid. In German. 1.00

L 69539 Frames 1293-1294 — 4'-Nitrobenzoyl-2-amido-5-naphthol-7-sulfonic acid. In German. 1.00

L 69540 Frames 1295-1296 — 3'-Aminobenzoyl-2-amido-5-naphthol-7-sulfonic acid. In German. 1.00

L 69541 Frames 1297-1298 — 4'-Aminobenzoyl-2-amido-5-naphthol-7-sulfonic acid. In German. 1.00

L 69542 Frames 1299-1300 — 1-Benzoylamido-8-naphthol-4,6-disulfonic acid. In German. 1.00

L 69543 Frames 1301-1303 — 4'-Sulfo-1-phenyl-3-methyl-5-pyrazolone. In German. 1.00

L 69544 Frames 1304-1307 — Naphthenic acids. In German. 1.00

L 69545 Frames 1308-1312 — 4-Bromo-1-aminoanthrachinone-2-sulfonic acid. In German. 1.00

L 69546 Frames 1313-1320 — Chlorine gas. In German. 1.00

L 69547 Frames 1321-1325 — Phosphorus. In German. 1.00

L 69548 Frames 1326-1328 — Phosphohydroxychloride. In German. 1.00

L 69549 Frames 1329-1330 — Phosphopentachloride. In German. 1.00

L 69550 Frames 1331-1337 — Phosphoric acid. In German. 1.00

L 69551 Frames 1338-1342 — Cadmium sludge. In German. 1.00

L 69552 Frames 1343-1348 — Sodium nitrite. In German. 1.00

L 69553 Frames 1349-1354 — Cryolite. In German. 1.00

L 69554 Frames 1355-1359 — Carbon bisulfide. In German. 1.00

L 69555 Frames 1360-1361 — 5-Nitro-2-toluidine. In German. 1.00

L 69556 Frames 1362-1363 — 3-Nitro-4-anisidine. In German. 1.00

L 69557 Frames 1364-1365 — 2-Anisidine-4-sulfonic acid. In German. 1.00

L 69558 Frames 1366-1367 — Acetoacetanilide. In German. 1.00

L 69559 Frames 1368-1370 — Acetoacet-2-toluidide. In German. 1.00

L 69560 Frames 1371-1373 — Acetoacet-2-anisidide. In German. 1.00

L 69561 Frames 1374-1377 — 2-Chlorobenzoic acid. In German. 1.00

L 69562 Frames 1378-1381 — 2-Toluene sulfonamide. In German. 1.00

L 69563 Frames 1382-1387 — 4-Toluene sulfonamide. In German. 1.00

L 69564 Frames 1388-1389 — Benzotrichloride. In German. 1.00

L 69565 Frames 1390-1392 — 3,5-Dinitro-2-cresol. In German. 1.00

L 69566 Frames 1393-1397 — 1,4-Naphthoquinone. In German. 1.00

L 69567 Frames 1398-1399 — 1,8-Naphthosultone. In German. 1.00

L 69568 Frames 1400-1401 — n-Propylalcohol. In German. 1.00

L 69569 Frame 1402 — Isobutylalcohol. In German. 1.00

Analytical Chemistry (contd)

L 69570 Frame 1403 — n-Propylchloride. In German. 1.00

L 69571 Frame 1404 — n-Butylchloride. In German. 1.00

L 69572 Frames 1405-1407 — Diphenylamine-4-sulfonic acid. In German. 1.00

L 69573 Frames 1408-1410 — Methylester of 4-toluenesulfonic acid. In German. 1.00

L 69574 Frames 1411-1413 — Ethylester of 4-toluenesulfonic acid. In German. 1.00

L 69575 Frames 1414-1417 — 4-Chlorobenzoic acid. In German. 1.00

L 69576 Frames 1418-1419 — 3-Acetamino-4-cresol. In German. 1.00

L 69577 Frames 1420-1421 — 4-Acetaminophenol. In German. 1.00

L 69578 Frames 1422-1423 — Monoethylether of pyrocatechol. In German. 1.00

L 69579 Frames 1424-1425 — Dimethylether of 2-benzoylamido-5-amino-hydroquione. In German. 1.00

L 69580 Frames 1426-1427 — Diethylether of 2-benzoylamido-5-aminohydroquinone. In German. 1.00

L 69581 Frame 1428 — Dichlorophthalic acid. In German. 1.00

L 69582 Frame 1429 — Tetrachlorophthalic acid. In German. 1.00

L 69583 Frames 1430-1431 — 1-Amino-8-naphthol-5-sulfonic acid. In German. 1.00

L 69584 Frame 1432 — Ethylcarbazole. In German. 1.00

L 69585 Frames 1433-1435 — Leuco-1,4-diaminoanthraquinone. In German. 1.00

L 69586 Frames 1436-1437 — 4,4-Diamino-2'2' '-5'5"-tetramethyl-triphenylmethane. In German. 1.00

L 69587 Frames 1438-1439 — 4'4-Diamino-2'2''-5'5"-tetramethyl-2-chlorotriphenylmethane. In German. 1.00

L 69588 Frame 1440 — 4',4"-Diamino-3'3"-dimethoxytriphenyl-methane. In German. 1.00

L 69589 Frames 1441-1445 — Ethanolamine. In German. 1.00

L 69590 Frames 1446-1448 — Aldol. In German. 1.00

L 69591 Frames 1449-1450 — Aminosulfonic acid. In German. 1.00

L 69592 Frames 1451-1455 — 1-Aminoanthraquinone. In German. 1.00

L 69593 Frames 1456-1457 — 3-Amino-4-cresol-5-sulfonic acid. In German. 1.00

L 69594 Frames 1458-1459 — Ethylenechlorohydrin. In German. 1.00

L 69595 Frames 1460-1461 — 2-Chloroaniline-5-sulfonic acid. In German. 1.00

L 69596 Frames 1462-1464 — 1-Chloroanthraquinone. In German. 1.00

L 69597 Frame 1465 — Diethyl-3-aminophenol. In German. 1.00

L 69598 Frames 1466-1468 — Diethyl-3-phenetidine. In German. 1.00

L 69599 Frames 1469-1470 — 2-Chloro-1,3-phenylenediamine-5-sulfonic acid. In German. 1.00

L 69600 Frames 1471-1473 — 1,4-Diaminoanthraquinone. In German. 1.00

L 69601 Frames 1474-1475 — 1,5-Diaminoanthraquinone. In German. 1.00

L 69602 Frames 1476-1478 — Dichloroanthraquinone. In German. 1.00

L 69603 Frames 1479-1483 — Isophthalic acid. In German. 1.00

L 69604 Frames 1484-1488 — Glycocoll. In German. 1.00

L 69605 Frames 1489-1490 — Methylacetanilide. In German. 1.00

L 69606 Frames 1491-1493 — 1,2-Naphthylenediamine-5-sulfonic acid. In German. 1.00

L 69607 Frames 1494-1495 — Dehydrothioxylidine. In German. 1.00

L 69608 Frames 1496-1497 — 4-Toluidine-2-sulfanilide. In German. 1.00

L 69609 Frames 1498-1500 — 2-Nitrobenzidine. In German. 1.00

L 69610 Frame 1501 — "Diformylmetaminharnstoff". In German. 1.00

L 69611 Frames 1502-1503 — 1,5-Aminonaphthol-7-sulfonic acid. In German. 1.00

L 69612 Frames 1504-1505 — 1-Naphthylamine-5,7-disulfonic acid. In German. 1.00

L 69127 — Index to I. G. Farbenindustrie analytical methods. 2.00

PB L 17680. I. G. FARBENINDUSTRIE A. G. Analytical procedures used throughout I. G. Farbenindustrie plants. Includes micro, spectral, potentiometric methods, organic and inorganic analyses, measuring apparatus, etc. (WAA Microfilm Reel C 93 (TOM 161). Frames 1-932 and unnumbered frames) 1922-1944. 1077 f. Price: Microfilm-$6.00 - Enlargement print-$108.00

This microfilm reel consists of minutes of the meetings of the I. G. Farbenindustrie TEA Büro and includes reports which were presented at the meetings, relating to analysis and business and personnel matters. Approximately 42 meetings are reported covering the period 1922-1944. Tables and drawings are included in the reports. In German. The individual reports of the meetings (in German) are given below, these being available as enlargement prints only. An index to these reports gives the German titles of the reports together with their English translations. In some cases, only English titles are given.

PB Numbers Frames	Title	Price
	Reports on discussions of the analytical commission.	
L 60428 Frames 1-111	17th discussion, April 1936. In German. Discussion on electrometric methods of analysis. (1) Potentiometry and conductometry, pH measuring, visual, electrical and polarographic.	$6.00
L 60429 Frames 112-120	14th discussion, May 1935. In German. Business and personnel matters.	1.00
L 60430 Frames 121-125	11th discussion, November 1933. In German.	1.00
L 60431 Frames 126-136	Meeting of the analytical commission, May 1933. In German. General part: May 1933. Business and personnel matters. Special part: May 1933. D.K analysis: Hoeppler-viscosometer; flow pressure; diazo salts; methylamine and ethylamine; Burgess-Parr-bomb (calorimeter); 2-anisidine; ethanol and methanol; IG-analyses: G1-base, K-base, G-base; ethanolamine; leucamine; trichloro-acridone; naphthol AS; resorcin; sifting (particle size) analyses; tetrachloroethane.	1.00
L 60432 Frames 139-152	Meeting of the analytical commission, November 1932. In German. I. General part: Business situation; Screening plant, particle size analyses, standardisation, food dyes, IG analyses. II. Special part: Potentiometric methods; determination of small quantities of chlorate; micro-elementary analysis; coupling analysis; acetic anhydride; diazotisation; benzene sulfinic acid; determination of mono-, di-, and triethylamine; volatile acids.	1.00
L 60433 Frames 153-166	Meeting of the analytical commission, May 1932. In German. General part: (1) expenditure, personnel, etc.; (2) analytical results; (3) IG-commission for measuring apparatus; (4) meetings of the Anako. Special part: (1) Discussions about: Determination of water with magnesium nitrate, Tanus and Bums method for the determination of water; methyl chloride; bromoamino acids; minium and lead superoxyde; determination of fluorine content according to I.G.A. 472; the Burgess-Parr bomb; determination of 1,2-phenylenediamine; (determination of aldehyde: Poandorf's method); phenol and pyrocatechin in resorcin; m-toluidine and aniline in basic mixtures; viscosity of varnish dyestuff pastes; a sampler (thief tube); nickel crucible; Wolfen method for water estimation; carbazole; potential of the antimony electrode; Sanger-Black method for the determination of arsenic; Chorion damage through stray currents; 5-chloro-4-methylbenzophenone-2'-carboxylic acid; a test paper; use of diazotised aniline sulfonic acids; iodization of amido R acids. (2) Supplements and corrections for IG-analyses. (3) Simplification of sifting analysis. (4) Quality of sulphate and bromide; (5) Miscellaneous.	
L 60434 Frames 167-172	Meeting of the analytical commission, November 1931. In German. General part: (1 and 2) Expenditure and economics; (3) Résumé of analytical studies; (4) Sampling.	1.00
L 60435 Frames 173-183	Meeting of the analytical commission, May 1931. In German. General part: Business matters. Special part: Various technical details.	1.00
L 60436 Frames 184-198	Meeting of the analytical commission, February 1931. In German. General part: Works statistics, expenditure, credit matters, no technical information. Special part: IG-analyses: 1-naphthol-5-sulfonic acid; 4-aminodimethylaniline; phenol; 2-nitroanisole; 2-cresol; 1,5-dihydroxynaphthalene; guaicol; ethyl- and phenyl-alpha-naphthylamine; ethyl- and phenyl-beta-naphthylamine; 4-nitraniline-2-sulfonic acid; benzidine-3,3'-disulfonic acid; sodium salts of benzolmono- and benzoldi-sulfonic acid; o-nitrophenol in p-nitrophenol; reduction with stannous chloride; hydroxynitramine; 4-nitro-1-phenyl-3-methylpyrazolone; o-chloro-benzaldehyde; ethyl-alpha-naphthylamine; phthalic anhydride; acetylchloride; oleyl chloride.	1.00
L 60437 Frames 199-215	Meetings of the analytical commission, November and July 1930. In German. Personnel matters, expenditure, etc.; no technical information.	2.00
L 60438 Frames 216-229	Meetings of the analytical commission, May and March 1930. In German. Expenditure, personnel matters, etc.	2.00
L 60439 Frames 230-240	14th discussion of analysis, October 1929. In German. I. Inorganic products: Chlorine gas; phosphorus; phosphorus oxychloride; phosphorus pentachloride; phosphoric acid; cadmium sludge; sodium nitrite; determination of fluorine. II. Aliphatic series: Carbon disulfide. III. Wetting agents. IV. Solvents. V. Benzene- and naphthalene series: 5-nitro-2-aminotoluol; 3-nitro-4-aminoanisole; anisidine-4-sulfonic acid; acetoacetanilide; acetoacet-2-toluide; acetoacet-2-aniside; o-chloro-benzoic acid; 2-toluenesulfonamide; 4-toluenesulfonamide; benzotrichloride; 3,5-dinitro-2-cresol; 1,4-naphthoquinone; 1,8-naphthosultone. VI. Miscellaneous.	1.00
L 60440 Frames 241-260	13th discussion of analysis, April 1929. In German. I. Pyrites; determination of cryolite and fluorine; potash; caustic soda and potassium hydroxide; potassium chloride; potassium chlorate; phosgene; sodamide. II. Ethylene oxide. III. 1,3-monoformyl- and diformylphenylenediamine; 4-nitro-anisole; 4-anisidine; benzene mono- and	2.00

disulfonic acid; benzonitrile; benzene sulfochloride; 'Benzyl'-4-sulfanilic acid; methylsalicylate; 1,4-phenylenediamine-2-sulfonic acid; hexahydroaniline. IV. 1-amido-3-chlornaphthalene; m-nitrobenzoyl-aminonaphtholsulfonic acid 2,5,7; 4-nitrobenzoylaminonaphtholsulfonic acid 2,5,7; m-aminobenzoyl-aminonaphtholsulfonic acid 2,57; p-aminobenzoylaminonaphtholsulfonic acid 2,5,7; benzoylaminonaphtholsulfonic acid 1,4,6; 3-nitrophenylpyrazolone; 4-sulfophenyl-3-methyl-5-pyrazolone; naphthenic acid; 4-bromo-1-aminoanthraquinone-2-sulfonic acid. V. Prices of measuring apparatus; Analytical index; Analytical methods; Electrical temperature measurement at the boiling point; Determination of melting points.

L 60441 Frames 261-272 — 12th analytical discussion, October 1926. In German. 1.00

I. Inorganic series: (1) zinc fluoride; (2) calcium chloride; (3) sodium hypochlorite; (4) pyrites. II. Aliphatic series: (1) formic acid and sodium formate; (2) crotonaldehyde; (3) Turkey red oil; (4) castor oil; (5) dextrin; (6) amine determination. III. Benzene series: (1) 4-nitro-2-toluidine; (2 and 3) 1,4-diformylphenylenediamine and 1,4-diacetylphenylenediamine; (4) nitrosalicylic acid; (5) diazosalicylic acid; (6) m-xylidinesulfonic acid; (7) crude xylidine; (8) gallic acid; (9) 2,4-dinitroacetanilide; (10) benzyl aniline; (11) methyl diphenylamine; (12) 2,5-toluylenediamine; (13) phenylhydrazinesulfonic acid; (14) cumidine. IV. Naphthalene and heterocyclic series: (1) acetyl-H-acid; (2) imidazole-1-acid. V. New qualitative tests for manganese dioxide, lead dioxide, zinc dust, iron and naphthalene. VI. Miscellaneous: (1) determination of melting point; (2) determination of tertiary bases; (3) nitroso-beta-naphthol sulfonates; (4) fluorspar; (5) buna rubbers; (6) qualitative requirements; (7) chemically pure preparations; (8) distillation with electrical recording of temperatures.

L 60442 Frames 273-285 — 11th meeting of analysts, March 1926. In German. 1.00

I. Inorganic series: (1) chromium ore and bichromate; (2) fluorspar, hydrofluoric acid, sodium fluoride; (3) calcium carbide; (4) permanganate; (5) phosphorite; (6) sulfuryl chloride; (7) thionyl chloride; (8) sulphur; (9) zinc oxide, zinc chloride, zinc liquors; (10) standardization of normal solutions; (11) sulphur chloride. II. Aliphatic series: (1) butadiene; (2) sodium methylsulphate; (3) sodium ethylsulphate; (4) methylamine; (5) sodium acetate; (6) acetaldehyde; (7) oxalylchloride; (8) acetamide. III. Benzene series: (1) 3-monomethyltoluidine; (2) 4-monomethyltoluidine; (3) 3-monomethyltoluidine; (4) 4-monomethyltoluidine; (5) 3-dimethyltoluidine; (6) 4-dimethyltoluidine; (7) 3-diethyl toluidine; (8) 4-diethyl toluidine; (9) 3-ethylbenzyl toluidine; (10) 4-ethylbenzyl toluidine; (11) 4-chloro-2-toluidine; (12) 5-chloro-2-toluidine; (13) 2-chloro-4-toluidine; (14) 2-chloro-4-toluidine sulfonic acid; (15) 2-toluidine-4-sulfonic acid; (16) 2-toluidine-5-sulfonic acid; (17) 2,4-dichlorotoluol; (18) 3,4-dichlorotoluol; (19) 1,2,3-trichlorobenzene; (20) 1,2,4-trichlorobenzene; (21) o-xylol; (22) m-xylol; (23) p-xylol; (24) chloro-p-xylol.

IV. Naphthalene-, anthracene- and heterocyclic series.

L 60443 Frames 286-298 — 10th meeting of analysts, October 1927. In German. 1.00

I. Inorganic products. II. Products of the aliphatic series. III. Products of the benzene- and naphthalene series. IV. Newer knowledge with qualitative research methods for iron powder, zinc dust, lead- and manganese dioxide. V. Miscellaneous.

L 60444 Frames 299-312 — 9th meeting of analysts, March 1927. In German. 1.00

I. Technical products. II. Products in connection with the special meeting 1926. III. Products to be discussed for special reasons. IV. New qualitative tests for manganese dioxide, lead dioxide, zinc dust, iron powder and naphthalene. V. Miscellaneous.

L 60445 Frames 313-319 — Appendix to the report on the 9th meeting of analysts, March 1927. In German. 1.00

L 60446 Frames 320-335 — 8th meeting of analysts, October 1926. In German. 2.00

I. Commercial products. II. Continuation of systematic discussion; III. New qualitative tests for manganese dioxide, iron powder, zinc dust and naphthalene. IV. Methods to be discussed for special reasons. V. Miscellaneous.

L 60447 Frames 336-350 — 7th meeting of analysts, March 1926. In German. 1.00

I. Commercial products. II. Systematic discussion. III. Newer qualitative tests for zinc dust, iron powder, manganese dioxide and lead dioxide. IV. Methods to be discussed for special reasons. V. Miscellaneous.

L 60448 Frames 351-366 — 6th meeting of analysts, October 1925. In German. 2.00

I. Discussions about thermometers for distillation and solidification point. II. Commercial products. III. Systematic discussion. IV. Newer qualitative tests for manganese dioxide, lead dioxide, zinc powder and iron powder. V. Methods to be discussed for special reasons. VI. Miscellaneous.

L 60449 Frames 367-376 — 5th meeting of analysts, April 1925. In German. 1.00

I. Commercial products. II. Systematic discussion. III. Newer qualitative tests. IV. Methods to be discussed for special reasons. V. Sampling. VI. Miscellaneous.

L 60450 Frames 377-392 — 4th meeting of analysts, December 1924. In German. 2.00

I. Commercial products. II. Systematic discussion.

L 60451 Frames 393-407 — Program for 3rd analytic discussion, 3-13-24, Frankfurt. In German. 2.00

I. Discussion of circular letter, Leverkusen, of 1-16-23. II. Unsettled subjects from discussion of November 1922. (1) Report re question whether p-toluidine compared with aniline and xylidine and m-nitraniline compared with p-nitraniline has such advantages as to recommend the use of these 2 bases for analysis. (2) Report re checking the separation of 2-6- and 2-8-compounds by iodine- as well as by coupling method. (3) Report re checking of methods for separation of Schaeffer- and R-salt on the sample from Hoechst. (4) Determination of 1-

8-aminonaphthol-4-sulfonic acid compared with dihydroxy naphthalene-4-sulfonic acid with diazotized p-toluidine. (5) Determination of p-phenylenediamine upon reduction of silver chloride. (6) Determination of m-phenylenediamine sulfonic acid, congo acid or acetic acid. (7) Report re examination to judge quality of iron powder and zinc dust. (8) Determination of total zinc and cadmium in zinc dust. (9) Determination of amino-J-acid by coupling method, Berlin. III. (1) Methods for examination of hydrocarbon, nitro- and amino compounds. (a) Distillation test, theory, manufacture, machinery, thermometer. (b) Determination of freezing point, theory, manufacture, machinery, thermometer. (c) Other physical constants. (d) Reduction with stannous chloride, titanium chloride or determination of nitrite. (2) Special methods for examination of - (a) benzene, toluene, xylol and naphthalene; (b) assay of di- and trinitro compounds. IV. Analytical methods for nitrations of sulfonic acids. (a) 1-nitronaphthalene-5- and 8-sulfonic acid. (b) 1-nitronaphthalene-6,7-sulfonic acid. (c) 1-nitronaphthalene-3-6-8-trisulfonic acid. V. Intermediary products for sulfur colors. (1) Dinitrohydroxyphenylamine. (2) p-aminophenol. VI. Various methods. Benzidine or sulfanilic acid for standardising of nitrite solutions.

L 60452
Frames
408-410

Result of 3rd analytic meeting 3-11-25. In German. 1.00

L 60453
Frames
411-432

Program for analytic discussion 11-9/10-22 Leverkusen. In German. 2.00

(A) General. (1) Selecting of diazotising amines for coupling analysis. (2) Determination of iodine. General application of iodine method, information re various groups suitable for this method. (B) Special methods. (1) R-salt sulphonation: (a) Determination of total content by coupling, diazo compound, concentration, amount of soda, addition of salt; (b) Separation of 2,6- and 2,8-compounds: (1) by coupling; (2) by iodine determination. (c) Separation of "2,6-mono- and 2,3,6-disulfonic acid -" (1) by extraction of sodium salt with alcohol; (2) by colorimetric testing with nitrite. (2) 1,8-dihydroxynaphthalene-4-sulfonic acid. (a) Determination of 1,8-dihydroxy compounds. (b) Separation of 1-naphthol-4,8-disulfonic acid: (1) by various diazo compounds; (2) by variation of alkalinity. (c) Separation of 1,8-dihydroxynaphthalene. (d) Determination of sulfonic acid. (3) m-phenylenediamine: (a) Determination of substance capable of coupling. (b) Determination of o-compounds. (c) Determination of p-compounds. (d) Qualitative testing methods. (4) m-toluylenediamine: (a) Determination of substance capable of coupling. (b) Determination of isomers. (c) Qualitative testing method. (5) m-phenylenediamine sulfonic acid: (a) Determination by coupling. (b) Determination by isomers. (6) m-toluylenediamine sulfonic acid: (a) Determination by nitrite. (b) Determination by acidimetric method. (c) Determination by iodine. (d) Determination of sulfonic acid. (e) Qualitative testing. (7) β-naphthylamine sulfonic acid 2,1; 2,8: (a) Determination of total content and (b) of isomers. (8) 1-amino-8-naphthol-4-sulfonic acid: Determination of content and purity. (9) Research methods for (a) rock salt and (b) for iron powder. (10) Changing of methods for: (a) sulfur, sodium, raw smelting and (b) for zinc dust. (C) Analytic methods for examination of sulfonation of hydrocarbons. (1) General methods for determination of number of added sulfo groups. (2) Analysis of benzene monosulfonic acid sodium salt. (3) Separation and determination of isomeric benzol disulfonic acids. (4) Separation of isomers in the naphthalene series. (a) α- and β-monosulfonic acid: Cleavage of sulfonic group; determination of β-acid as Ca- or Ni-salt; determination of β-acid as tolidine salt. (b) Disulfonic acid: Determination of 1,5 acid (indirect) by determination of sulfur by precipitation as tolidine salt; separation of 1,5 and 1,6-acid; determination and separation of 2,6- and 2,7-acid; determination of 2,6-acid with p-phenylenediamine; determination of 2,7-acid with β-naphthylamine. (5) Application of methods of determination for normal sulfonations, composition of latter. (D) Various methods.

L 60454
Frames
433-441

Program for a discussion of analytical methods of preliminary products for triphenylmethane dyestuffs and research methods for salicylic acid and orthocresotinicacid, Leverkusen, 1-23-1922. In German. 1.00

I. Benzaldehyde-o-sulfonic acid: Sulfite method; phenylhydrazine method; sulfur method. II. Ethylbenzylaniline sulfonic acid: Iodine method; bromination method; determination of disulfonic acid in monosulfonic acid; sulfur method. III. Tetramethydiaminodiphenylmethane: Picrate method, freezing point; qualitative testing. IV. Hydrol: Bromination method; separation of purified hydrol; sulfur method. V. m-nitrobenzaldehyde and m-hydroxy-benzaldehyde: Hydrazone method and qualitative testing; determination of isomers. VI. Research methods of: Benzaldehyde, o-chlorobenzaldehyde; brown lead oxide; manganese dioxide; dimethylaniline, diethylaniline; monoethylaniline, monomethylaniline; ethylbenzylaniline, methylbenzyl; monoethyl-o-toluidine; aniline, dibenzylaniline; diethyl-m-toluidine; monomethyl-o-toluidine. VII. Research methods for salicylic acid and ortho-cresotic acid.

L 60455
Frames
442-450

Minutes on discussion of analytical methods for alizarin intermediary products, 11-27-25, Leverkusen. In German. 1.00

(1) Sulfonic acids; (2) hydroxyanthraquinones; (3) aminoanthraquinones; (4) nitro- and chloroanthraquinones; (5) polynuclear compounds.

L 60456
Frames
451-462

Report of discussion of executive committee of analytic laboratories Aug. 6, 1926. In German. 1.00

I. Distribution of analytical work. II. Description of work. III. Calculation and distribution of expenses. IV. Utilization of analytic results. V. Decreasing of analytical work.

L 60457
Frames
463-466

Minutes of meeting of analyst commission, Jan. 20, 1927, Frankfurt. In German. 1.00

Proposals for analyses 223 to 263; Report on a discussion on IG thermometers; Analysis of β-naphthylthioglycolic acid; Tables on distillation of aniline.

L 60458 Frames 467-472 — Minutes of meeting of analyst's commission, May 1927. In German. 1.00
Discussion on analysis 264-305; aceto-o-toluidine; urea from amino-naphthol J; benzidine mono-sulfonic acid; chloreanil; dimethylsulfate; naphthalene-1-6-disulfonic acid; carbazole; amidonaphthol G; R salt in Schaeffer's salt; 1,8-dihydroxy-naphthalene-3,6-disulfonic acid.

L 60459 Frames 473-493 — Report on a simple electron tube apparatus for electrometric quantitative analysis. In German. 2.00

L 60460 Frames 494-497 — Minutes of a meeting of the analytical commission, June 1928. In German. 1.00
(1) IG analyses; (2) Program for the 12th discussion of analysis; (3) Measuring apparatus; (4) Chemico-technical research methods and hand book by Lunge-Berl; (5) Coupling temperature of Schaeffer salt; (6) Thickness of dyestuff.

L 60461 Frames 498-536 — Private communication to Prof. Berl. In German. 3.00
Drying of gases with phosphorous pentoxide; determination of carbon dioxide; electrode carbon; determination of bicarbonate content of potassium carbonate; chromous chloride solution as oxygen absorbing agent; proof of chloride solution as oxygen-absorbing agent; preparation of standard solution for quantitative determination of chlorine with o-tolidine; determination of small quantities of sodium in potassium salt according to Blanchetiere's method, as sodium magnesium uranium acetate; determination of Fe in Fe_2O_3 (magnetite); determination of fluorine by F. G. Hawley, altered for analysis of high percent fluorides such as cryolite, aluminum fluoride, melt, etc.; calcined alumina; aluminum fluoride; cryolite; bauxite; aluminum; aluminum alloys; 0.1 N titanium trichloride as titrating solution; setting of nitrite solution; standardisation of diazo solution; pure naphthalene; acetic anhydride.

L 60462 Frames 537-540 — Minutes of the discussions on analytical methods, Jan 25, 1929, Frankfurt. In German. 1.00
(a) I. G. analyses; (b) Qualitative standards; (c) Thermometers; (d) Melting point determination; (e) Chemic. pure reagents for analytic purposes; (f) Index of analytic literature; (g) Nitroso-β-naphtholbisulphite.

L 60463 Frames 541-544 — Key for index of analysis (A). In German. 1.00
I. General. II. General analytical and physical methods (apparatus and machinery). III. Diagnosis, reactions, separation and gravimetric determination of elements and inorganic compounds. (A) Detection, separation and gravimetric determination of (inorganic) anions; (B) Detection, separation and gravimetric determination of cations. IV. Gas analytical processes (inorganic and organic). V. Volumetric analyses and determination of pH (inorganic and organic). VI. Detection, reactions, separations and gravimetric determination of organic compounds. VII. Micro-chemical analysis. VIII. Pharmaceutical and medico-chemical analysis. IX. Special technological research.

L 60464 Frames 545-546 — Minutes of meeting of commission for standardising analytical methods, August 1929. In German. 1.00

Minutes of meetings of the analytic commission covering the period from January 1937 to March 1944.

L 60465 Frames 547-614 — Meeting 20, Jan.15, 1937, Leverkusen. In German. 5.00
(1) Spectroscopic methods; (2) Spectrum analysis in analytic chemistry; (3) Quantitative absorption spectrum analysis in organic chemical analysis; (4) Absorption spectrum analysis, particularly for organic substances; (5) Use of X-ray diagrams in analytical practice; (6) Research on spectral-analysis of mercury and of solutions of alkali chlorides in mercury baths; (7) Possibilities of Raman- and fluorescence analysis.

L 60466 Frames 615-624 — Meeting 21, May 7, 1937, Bitterfeld. In German. 1.00
Economic position of the analytic laboratories.

L 60467 Frames 625-637 — Meeting 22, Nov. 5, 1937, Frankfurt. In German. 1.00
Discussion on the commercial position.

L 60468 Frames 638-647 — Meeting 23, Mar. 22, 1938, Ludwigshafen. In German. 1.00
Commercial position of the analytic laboratories.

L 60469 Frames 648-730 — Meeting 24, May 23, 1938, Leuna. In German. 6.00
(1) Gas analysis; (2) Gas analysis in Leuna in general; (3) Exact gas analysis with aid of Drehschmidt apparatus; (4) The Stock apparatus and its use for separation of gaseous hydrocarbons; (5) Separation of hydrocarbons by distillation; (6) Use and development of the suspension balance; (7) Determination of mixtures of butadiene, butylene, butane, hydrogen, acetylene and monovinylacetylene; (8) Determination of butadiene with maleic anhydride; (9) Determination of sulfur and halogen in gases; (10) Determination of concentrations of aromatic amines in the air of plants; (11) An automatic apparatus for SO_2 determination; (12) Chromous chloride for absorption of oxygen; (13) Magnesium chloride for drying of oxygen; (14) Status of amine analysis in Leuna.

L 60470 Frames 731-742 — Meeting 25, Sept. 23, 1938, Frankfurt. In German. 1.00
Commercial status of the analytic laboratories.

L 60471 Frames 743-750 — Meeting 26, Mar. 17, 1939, Frankfurt. In German. 1.00
Commercial status of the analytic laboratories.

L 60472 Frames 751-871 — Meeting 27, May 12/13, 1939, Oppau and Ludwigshafen. In German. 9.00
(1) Microanalysis and research; (2) Microanalysis at the analytic laboratory, Oppau; (3) Development of the microanalysis of elements at the Ludwigshafen research laboratories; (4) Experience with microanalytic determination of oxygen in organic substances by method of Ludwigshafen; (5) Determination of traces of heavy metal with dithiosone in fertilizers and technical products; (6) Quantitative microdetermination of metals in organic substances; (7) Determination of traces of elements in organic substances; (8) Determination of traces of metal carbonyls in the air; (9) Determination of small quantities of cobalt in cuprous chloride solutions

Analytical Chemistry (contd)

and copper salts; (10) Determination of traces of gold in ores; (11) Applications of electrometric methods of measuring of traces; (12) New method of microdetermination of molecular weights by Barger; (13) Contribution to history of chromatographic and capillary analysis.

L 60473 Frames 872-879 — Meeting 28, Mar. 14, 1940, Frankfurt. In German. Commercial status of the analytical laboratories and personnel problems. 1.00

L 60474 Frames 880-885 — Meeting 29, Oct. 29, 1940, Ludwigshafen. In German. Commercial position of the analytic laboratories. 1.00

L 60475 Frames 886-896 — Meeting 30, Mar. 21, 1941, Frankfurt. In German. Commercial position of the analytic laboratories. 1.00

L 60476 Frames 897-908 — Meeting 31, Oct. 17, 1941, Frankfurt. In German. Commercial position of the analytic laboratories. 1.00

L 60477 Frames 909-910 — Meeting 32, Mar. 20, 1942, Frankfurt. In German. Commercial position of the analytic laboratories 1.00

L 60478 Frames 911-917 — Meeting 33, Oct. 16, 1942, Frankfurt. In German. Commercial position of the analytic laboratories. 1.00

L 60479 Frames 918-923 — Meeting 34, Mar. 19, 1943, Frankfurt. In German. Commercial position of the analytic laboratories. 1.00

L 60480 Frames 924-932 — Meeting 35, Mar. 17, 1944, Frankfurt. In German. Commercial position of the analytic laboratories. 1.00

L 60481 — Analytical procedures used throughout I. G. Farbenindustrie plants. Includes micro, spectral, potentiometric methods, organic and inorganic analyses, measuring apparatus, etc. Index. 2.00

*PB L 80573. POLAK, H. and VENEKAMP, R. H. Identification of organic compounds. (BIOS Interrogation Rept XII). Jul 1946. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00

An exceptionally rapid method has been developed for identifying organic substances which can be applied to very small samples (down to some millionth part of a gram). Two types of experiments are used: (1) microscopical observation of the melting process of the mixture of the unknown substance, with the known substance. This is the determination of the eutectic temperature. (2) further identification is obtained by comparing the refractive index of the unknown substance with the index of refraction of a set of standard glass powders. A series of 21 powders is available. The usefulness of this method depends on the availability of extensive tables, containing eutectic temperatures and indices of refraction of a great number of compounds.

PB L 80823. ROSENMANN, C. ERNST and others. Volatility and vapor pressure of nine organic arsines. n. d. 11 p. Price: Mimeo-50¢

The volatility of nine substituted arsines has been measured between 0 and 60 by a transpiration method. Vapor pressures have been calculated from the volatility measurements, and from these data logarithmic equations have been developed for both the volatility and the vapor pressure as a function of the temperature. The mean molar latent heat of evaporation over the temperature range 0 to 60 has been computed from the vapor pressure equation for each compound. The average precision of these measurements is better than ~2% over the specified temperature range. However, the equations may be used to extrapolate to other temperatures with somewhat less precision. University of Chicago Toxicity Laboratory.

PB L 80699. TRUEBLOOD, KENNETH N. Part II: The development of a chromatographic-spectrophotometric method for the isolation and estimation of minor impurities in RDX. Mar 1947. 66 p. Price: Mimeo-$1.75

The application of chromatographic-spectrophotometric methods to the development of a procedure for the isolation and estimation of about ten minor impurities in RDX, often called cyclonite and is cyclotrimethylene-1,3,5-trinitramine, is described. This development included a detailed study of the chromatographic behavior of RDX and of nine similar nitramine compounds which were considered to be possible impurities in RDX, and also of methods for the isolation of the components of a mixture of any or all of these substances. In addition a method was devised for concentrating the impurities when they occurred in amounts too small to be detected directly in the original sample. Rigorous tests and checks were applied to all phases of the analytical procedure. The procedure is suitable for the detection and approximate estimation of as little as a few parts in a million of any of the known compounds. In addition provision has been made for the detection of hitherto unknown substances. This work was carried out under Contract OEMsr-881 between the Office of Scientific Research and Development and the California Institute of Technology.

Miscellaneous Chemicals

PB L 86640. COPPOCK, J. B. M. and BIDE, A. E. Interrogation of Dr. Worbs of Breslau Technische Hochschule, Department of Chemical Technology, at Gasthaus Mundstork, Bortfeld near Brunswick. (Target No. C-22/1240) (CIOS Evaluation Rept 305) Aug 1945. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

The interrogation of Dr. Worbs brought out a few details concerning his catalytic process for converting ethylene to ethylene oxide. A fuller investigation of his research records was recommended.

PB L 52003. GERMANY. REICHSAMT FÜR WIRTSCHAFTSAUSBAU. First meeting of the cooperative group for the analytical and preparative separation of hydrocarbon mixtures, April 5, 1940. Apr 1940. 131 p. Price: Multilith-$3.50

Abstracts of the individual papers in this report are given below. The reports are all in German.

Pages	Title
3 PB L 52003	List of participants. In German. The names of the representatives of various governmental agencies and industrial enterprises who were present at the meeting are listed.
4 PB L 52003	Introductory remarks. In German. The motives which led to the establishment of this cooperative group are presented.
5-6 PB L 52003	Instructions. In German. These pages contain 9 administrative rules and instructions for the meetings of the cooperative groups to facilitate research for the "four year plan." These meetings were sponsored by the "Reichsamt für Wirtschaftsausbau Berlin" (Reich office for economic development).

7-14
PB L 52003

SCHULTZE, G. R. (Universität Berlin). Quantitative separation of hydrocarbon mixtures. In German.
The need of exact analyses of propane-propene mixts. in the synthesis of glycerol from propene, and the analyses of 2-methylpropane and butane in isomerisation studies instigated a search for better methods for obtaining these data. The use of H_2SO_4 and Br water for the analysis of olefins was discarded. The catalyzed hydrogenation of olefins over Ni or Pd on SiO_2 gel was not entirely satisfactory. Combustion data were likewise of little value and inconsistent. Early attempts with simple low-temp. distn. of the low-boiling hydrocarbons were not satisfactory because the method required 24 hrs. and used large vols. of liquid air. The sepn. of hydrocarbons by distn. into groups (C_2, C_3, and C_4) followed by the analysis of each group by hydrogenation or combustion was an improvement. The most satisfactory analytical method was found to be a normal-pressure fractionation with a column of the Podbielniak type having a vacuum-jacketed cooling head with a 2-turn brass spiral. The cooling head contained a liquefied buffer gas. With this modified column a 100-cc. gas mixt. contg. 7 components was analyzed with an accuracy of about 1%. The analysis is rapid, and comparatively little liquid air is needed.—From Chemical Abstracts.

15-56
PB L 52003

STERN, G. (I. G. Farbenindustrie A. G., Oppau). Isolation and identification of hydrocarbons from mixtures by new methods. In German.
Procedures are described for the analysis of the products of the cracking of oils and the products of the CO-H_2 synthesis of hydrocarbons. For the sepn. of o-, m-, and p-xylenes a fractionating column employing the principle of the Hahn head was constructed. The column proper contained a Pt spiral in the vapor path. The column was jacketed by a bath the temp. of which could be so regulated as to allow refluxing of the charge and to permit the removal of a portion of the reflux. After three fractionations (using a synthetic mixture of equal parts of o-, m-, and p-xylenes) approximately half of the o-xylene was obtained as 95% pure material. The residual ternary mixture could not be further sepd. The selective bromination of olefins in an olefin-paraffin mixture was unsuccessful owing to side reactions. The addn. of HBr was employed with success. In a suitable reaction vessel, a V-tube with an inner middle leg, a C_5 olefin-paraffin mixt. was agitated with 4.5 N HBr, and the loss of HBr was detd. The trimethylethylene and asymmetrical methylethylethylene Br derivs. were decompd. with water and the HBr detd. by titration. At 0° all olefins reacted and the paraffins were extd. into another leg of the V-tube. These were further analyzed by conventional means. In analyzing the C_5 olefins three groups were detd. (1) tert-olefins, (2) isopropylethylene, and (3) straight-chain olefins. In adapting the above procedure to the hexenes, other olefin groups were encountered. With the heptenes a more concd. (6N) HBr was necessary for complete reaction. A second method for detg. olefins, especially C_4 olefins, is the selective catalyzed addn. of HCl or HBr in the presence of $BaCl_2$ or $BaBr_2$. The detn. of iso-C_4H_8 is easy by this procedure. A third method using $Hg(OAc)_2$ may be employed for detg. certain olefins, whereby the rate of reaction of the olefin with the reagent is a function of the olefin structure. The detn. of 2,4,4-trimethyl-1-pentene in the presence of 2,4,4-trimethyl-2-pentene can be accomplished with this reagent. Dienes possessing conjugated double bonds were sepd. from cracked material by the formation of the maleic anhydride adduct. These adducts were characterized by their reactions with inorg. acetates, and also by the conversion of the adducts to the corresponding acids. Cyclic dienes can be sepd. from a mixt. of cyclic and acyclic dienes by the addn. of α-naphthoquinone which reacts only very slowly with open-chain dienes. The analysis of synthetic oil contg. olefins, paraffins, alcs., acids, and esters is described in detail. The oil is treated with alkali to remove the acids and to saponify the esters. The residual oil is fractionated and the fractions are worked up separately. The alcs. present were extd. from the oil by refluxing with excess phthalic anhydride for 6 hrs. The lower-boiling esters so obtained were sepd. by fractionation. The higher esters were converted to the half methyl esters through diazomethane. The half methyl esters could be fractionated without decompn., and these esters could be identified. The alcs. are recovered by sapon. of the esters, and the alcs. characterized by their isocyanates. Olefins are removed from the oil as described above. The paraffins can then be isolated by means of careful fractionation. Extensive tables are included which describe the alcs., acids, and esters isolated and identified in certain fractions of oil produced through the CO-H_2 synthesis process.—From Chemical Abstracts.

57-59
PB L 52003

KERT, L. (Univ. Wien, Germany). The analysis of mixtures of aliphatic and alicyclic hydrocarbons. In German.
One of the objects of this work was to find a simple method for the analysis of mixts. of aliphatic and alicyclic hydrocarbons. To improve the aniline-point method, the miscibility curves of 8 aliphatic, 6 alicyclic, and 4 olefin hydrocarbons with aniline were studied from 0° to the critical miscibility temp. The effects of increasing mol. wt. in a homologous series, branching, and of methyl groups in a C_6 ring system were studied. The miscibility differences of several substances in a given temp. range are believed to be large enough to effect a sepn.—From Chemical Abstracts.

59-78
PB L 52003

GROLL, H. (Rhenania-Ossag, Hamburg). Fractionation in the laboratory as an expedient to aliphatic organic chemistry. I. General methods and apparatus. In German.

The theory of distn. is briefly discussed and numerous fractionating columns are described. Specifically designed glass expansion bellows are shown for vacuum-jacketed columns used in high-temp. work. A vacuum-jacketed column having a charge capacity of 1-4 l. and packed with 8-mm. Raschig rings is described which has 4 theoretical plates. This column with glass rings and operating at atm. pressure shows 10 theoretical plates. Column packings such as glass helices, Raschig rings, and Stedman wire nets are compared. The Stedman packing possessed the highest H.E.T.P. under the conditions of the tests. A column head is also described in which a sepn. of phases may be accomplished.--From Chemical Abstracts.

79-88
PB L 52003

GROLL, H. (Rheinanie-Ossag, Hamburg). Fractionation in the laboratory as an expedient to aliphatic organic chemistry. II. Precise analytical fractionation of gases at low temperatures. In German.
A detailed description is given of a column essentially 900-2000 mm. in height, 7 mm. internal diam., and packed with a Cr-Ni spiral of 0.64 mm. thickness having 3.0-3.5 mm. pitch. Examples are cited of the analyses performed with this column on natural gas (C_1-C_6 hydrocarbons) and on cracked gases, both before and after H_2SO_4 treatment.--From Chemical Abstracts.

89-91
PB L 52003

JOST, W. (Univ. Leipzig, Germany). Columns with an especially high separation factor. In German.
A column capable of sepg. two components boiling 1° apart at 100° was desired. The spinning band column of Lessene and Lochte (C. A. 32, 7310^3) was modified so that its efficiency was much increased. Instead of the simple metal band of Lessene and Lochte, a tube was made to rotate with a fixed latitude within another tube, both tubes possessing ring-shaped fins. These fins actually formed the column. Such a column constructed of glass 25 cm. in height showed 15 theoretical plates. A metal column of 50-cm. height possessed 56 theoretical plates. These data were detd. with a benzene-ethylene chloride test mixt.--From Chemical Abstracts.

93-102
PB L 52003

KOCH, H. (Kaiser-Wilhelm-Institut für Kohlenforschung). The quantitative separation of hydrocarbons by distillation at various temperatures and the separation of olefins and paraffins. In German.
The sepn. and identification of some of the components of Kogasin are described. For studying the lower hydrocarbons, a low-temp. column was designed that consisted of a 6-m. spiral of glass tubing of 5 mm. inside diam. surrounded by a vacuum jacket. The head of this column works on the thermosiphoning principle. With a test mixt. of n-heptane and methylcyclohexane, this column showed 20 theoretical plates. A chart of the sepn. of C_3H_8, n- and iso-C_4H_{10}, and iso-C_5H_{12} is shown. A high-temp. column was developed in which a heated oil was circulated around the column to maintain adiabatic conditions. A review of the results obtained in

I-ms. methods for olefins is described. The Kaufmann and Grosse-Oetringhaus thiocyanogen method using CCl_4 gave the best results for the 5 olefin types. The $Hg(OAc)_2$-MeOH method was used for sepg. olefins from paraffins. An olefin-paraffin mixt. was extd. with $Hg(OAc)_2$-MeOH reagent and the paraffins removed from the reaction mixt. by reduced-pressure distn. The olefins were recovered in pure form by hydrolyzing the $Hg(OAc)_2$-olefin complex with a strong mineral acid such as HCl. Of the paraffins in a lower Kogasin fraction, 2-methylbutane, n-C_5H_{12}, 2-methylpentane, 3-methylpentane, n-C_6H_{14}, 2-methylhexane, 3-methylhexane, and n-C_7H_{16} have been isolated. Of the monoolefins 3-methyl-1-butene, 1-pentene, cis- and trans-2-pentene, 3-methyl-1-pentene, 4-methyl-1-pentene, 1-hexene, cis- and trans-2-hexene, 3-methyl-1-hexene, 5-methyl-1-hexene, 4-methyl-1-hexene, 1-heptene, cis- and trans-2-heptene have been isolated.--From Chemical Abstracts.

103-112
PB L 52003

WICKE, E. (Univ. Lab., Göttingen, Germany). Fundamentals concerning the sorption separation process. In German.
A short discussion of the principles of the sorption phenomenon is presented. Mixed adsorption over SiO_2 gel and over activated C is described. Exptl. data show the highly specific adsorption of oxygenated compds. such as esters and ethers on SiO_2 gel in the presence of n-pentane and related hydrocarbons. A general discussion of chromatographic analysis, diffusion analysis, and continuous sepn. processes for gases and liquids from room temp. to 150° is included.--From Chemical Abstracts.

113-120
PB L 52003

PETERS, KURT (I. G. Farbenindustrie A. G., Ludwigshafen). Adsorption and desorption. In German.
A review concerning the theoretical and practical aspects of adsorption and desorption as a means of sepn. and purification of gases is presented. The lack of wide-spread usage of the sorption art is decried, especially in view of its good results. The work on the sepn. and purification of the rare gases, Kr, Xe, and A using activated C is described. Through this adsorption and fractional desorption the m. p. of the purified Kr was found to be -157° as compared with a previously reported value of -169°, purified Xe m. -112° as compared with -140° previously reported. 14 references.--From Chemical Abstracts.

121-126
PB L 52003

HARTECK, P. (Universität Hamburg). Purification and separation of hydrocarbons with the aid of desorption. In German.
Selective adsorption of hydrocarbons on SiO_2 gel is described. In the sepn. studies approx. 1 g. SiO_2 gel adsorbed 0.1 g. hydrocarbon. In the sepn., the hydrocarbon gases were adsorbed on the SiO_2 gel, and the mass was cooled to liquid-air temps. and the system evacuated. The stepwise desorption of the hydrocarbons was carefully followed The use of SiO_2 gel is recommended because of its high thermal con-

and its highly preferential adsorption of olefins. Graphs are shown for the sepn. of C_4H_6-C_4H_8, C_2H_6-C_2H_4, and C_3H_8-C_3H_6 mixtures with activated C and SiO_2 gel.--From Chemical Abstracts.

129-131
PB L 52003 GOUBEAU, J. (Univ. Lab., Göttingen, Germany). Analysis of hydrocarbon mixtures with the aid of the Raman effect. In German.
The qual. aspects of the adaption of the Raman effect to the identification of hydrocarbons is discussed. Aromatic compds, because of their very strong lines, can be detected in mixts. of 0.1% concn. Hydrocarbon mixts. contg. compds. such as n-C_4H_{10}, iso-C_4H_{10}, n-C_5H_{12}, n-C_6H_{14}, cyclohexane, etc., can usually be detected when about 1% is present. Decanes and higher hydrocarbons are more difficultly detected, since their lines are weak and their structures are so nearly alike, i. e., small structural changes for such large mols. In general the Raman effect is especially good in distinguishing classes of compds. such as aromatics, olefins, paraffins, and cycloparaffins. The quant. application of the Raman effect is based on the detn. of line intensities. Tests on 60 synthetic mixts. of benzene-toluene, benzene-cyclohexane, cyclohexane-methylcyclohexane, amyl alcohol-tert-butyl alcohol gave results which showed deviations of 1.2%.--From Chemical Abstracts.

132-134
PB L 52003 Discussion. In German.
The various problems arising during the discussion of the above lectures and the critical remarks and supplementary suggestions made are summarized.

PB L 13093. I. G. FARBENINDUSTRIE A. G. Processes and equipment in the field of production of coal and tar derivatives. (FIAT Microfilm Reel C 98 (TOM 152), Frames 1-1369) n.d. 1966 f. Price: Microfilm-$6.00 - Enlargement print-$197.00.
The 100 individual items on this FIAT microfilm reel are listed below and will be available as enlargement prints only. The entire reel may be purchased in microfilm form for $6.00. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German, except when otherwise indicated.

PB Numbers Frames	Title	Price
L 65372 Frames 1-30	The state of low temperature carbonization in Germany before the termination of the war. By Adolf Thau. In German.	$ 2.00
L 65373 Frames 31-201	Documents to accompany article by Adolf Thau entitled "The State of Low Temperature Carbonization in Germany before the Termination of the War". Diagrams and tables relating to low temperature carbonization of coal. Annual report of the "Brennkrafttechnische Gesellschaft E.V." 1940-41. In German.	12.00
L 65374 Frames 202-418	The low temperature carbonization of coal. Supplement to "The Low Temperature Carbonization of Lignite and Coal." In German.	15.00
L 65375 Frames 419-424	70 years of Didier Oven construction coking at medium temperature. In German. One page somewhat difficult to read.	1.00
L 65376 Frames 425-482	Report on the meeting "Domestic Motor Fuels", Nürnberg, October 1936. In German.	5.00
L 65377 Frames 483-506	Letter to E. Rhodes, description, drawings, diagrams and photographs relating to the method of carbonizing coal at low temperatures as applied by "Brennstofftechnik." In German.	2.00
L 65378 Frames 507-513	Low temperature carbonization of solid fuels, in Germany. In English.	1.00
L 65379 Frames 514-524	Krupp-Lurgi-chamber plants for low temperature carbonization of coal. In German.	1.00
L 65380 Frames 525-540	Lurgi carbonizers. In German.	2.00
L 65381 Frames 541-550	The pressure gasification of solid fuels with oxygen. In German.	1.00
L 65382 Frames 551-552	Statistics for 1943. Production and treatment of low temperature carbonization tar. In German.	1.00
L 65383 Frames 553-564	The low temperature carbonization of coal by the Koppers method. In German.	2.00
L 65384 Frame 565	Flow sheet for Krupp Lurgi low temperature carbonization plant - Wanne Eickel. In German.	1.00
L 65385 Frame 566	Flow sheet for Krupp Fischer-Tropsch plant - Wanne Eickel. In German.	1.00
L 65386 Frame 567	Krupp motor fuel plant lay-out. In German.	1.00
L 65387 Frames 568-574	Reprints of articles concerning low temperature carbonization and low temperature tar, received from Fried. Krupp A.G., Essen - Ruhr. Low temperature carbonization tar from coal. In German. Incomplete.	1.00
L 65388 Frames 575-583	Concerning operating experience with the Krupp-Lurgi plant for low temperature carbonization of coal at "Amalie" pit of Fried. Krupp A.G., Essen. In German.	1.00
L 65389 Frames 584-589	Watergas production from coke produced by low temperature carbonization of coals. In German.	1.00
L 65390 Frames 590-593	Physical testing of coke produced inside a 5 kg. drum by low temperature carbonization and high temperature carbonization. In German.	1.00
L 65391 Frames 594-598	Determination of the pumpability of fuel oils. In German.	1.00
L 65392 Frames 599-606	Miscibility of fuel oils. In German.	1.00
L 65393 Frames 607-612	Laboratory equipment for low temperature carbonization of coal according to the "heating surface" process. In German.	1.00

L 65394 Frames 613-622 — The previous work of the "Vereinigung für Steinkohlenschwelung" (Association for low temperature carbonization of coal.) In German. 1.00

L 65395 Frames 623-625 — Concerning the low temperature carbonization of coal in connection with the Fischer-Tropsch-Ruhrchemie-synthesis. In German. 1.00

L 65396 Frames 626-635 — Viscosimetric method of determining the miscibility of mixtures of hydrocarbons, especially of fuel oils. In German. 1.00

L 65397 Frames 636-637 — Letters from Messrs. Carl Still, Recklinghausen, to Mr. E. C. Rhodes, referring to descriptions and drawings relating to the processing of tar. In German. 1.00

L 65398 Frames 638-642 — Description of a tar processing plant for Sächsische Werke A.G. in Espenhain. In German. 1.00

L 65399 Frames 643-645 — Description of a plant for centrifugal treatment of crude tar. In German. 1.00

L 65400 Frames 646-649 — Description of a tar distillation plant. In German. 1.00

L 65401 Frames 650-651 — Description of a redistilling still for oils containing paraffin. In German. 1.00

L 65402 Frames 652-656 — Description of a pitch coking plant. In German. 1.00

L 65403 Frames 657-658 — Description of a plant for processing 8 tons per hour of hydrogenation residual sludge for the Pölitz Hydrogenation Works. In German. 1.00

L 65404 Frames 659-662 — Treatment of tars obtained by low temperature carbonization according to the process of BIK-Guldenwerke Chemische Fabrik A.G., Berlin-Oranienburg. In German. 1.00

L 65405 Frames 663-667 — Contributions to the knowledge of tar oil produced by low temperature carbonization of coal. (Special print from "Oel und Kohle vereinigt mit Petroleum", volume 45, page 770 (1939)). In German. 1.00

L 65406 Frames 668-672 — Experimental report on a discontinuous distillation of low temperature carbonization of tar from Waldschacht coal in the test plant of the "Ges. für Teerverwertung m.b.H.", Duisberg-Meiderich. In German. 1.00

L 65407 Frames 672A-673 — Description and diagram of hydrogenation of coal. In German. 1.00

L 65408 Frames 674-677 — "Sumpf" phase distillation No 888. General description of the plant, with flow diagram (drawing No. M6060-1) and drawing No. 11045 (4), showing locations of thermocouples on pipe heater. In German. 1.00

L 65409 Frames 678-684 — Descriptions of phenol plants including drawings and flow diagrams. In German. 3.00
Several frames are illegible.

L 65410 Frames 685-697 — Description of the operation of phenol plant "South" with drawings: Phenol refining, building No 992; Phenol fractination, building No 983; Phenol fractination, building No 985 including flow diagram; Phenol fractination, building No 983 including equipment arrangement; Pyrocatechol plant, building No 994. In German. 4.00

L 86732 Frames 698-706 — Description of the manufacture and distillation of Cyclohexanol, with drawing M 6881-16, building No 978 and No 975. In German. 2.00
Print is blurred in places.

L 86733 Frames 707-710 — Description of the manufacture of Cyclohexanone with flow diagram M 6882-16, building No 975. In German. 2.00
Print is somewhat blurred in places.

L 86734 Frames 711-713 — Description of the manufacture of Oxime and Luran (Caprolactam) with flow diagram M 5826-3. In German. 2.00

L 86735 Frames 714-716 — Description of the manufacture of adipic acid, with flow diagram SK 31745, building No 208. In German. 2.00

L 86736 Frame 717 — The stages of the synthesis of Ipamides A, B and U. In German. 2.00

L 86737 Frames 718-738 — The oxidative ring opening of the o-dihydroxybenzenes to form muconic acid derivatives. In German. 4.00

L 86738 Frames 739-754 — The decomposition of low temperature carbonization tars from lignite and oil shale with selective solvents. In German. 3.00

L 86739 Frame 755 — Processing in the Rositz Refinery in 1942-1943. In German. 2.00

L 65411 Frames 756-759 — Production of paraffin from low-temperature carbonization tar including drawing SK 327 and description thereof. In German. 1.00

L 65412 Frames 760-762 — Procedure for making motor fuel from low temperature carbonization tar (by cracking). In German. 1.00

L 65413 Frames 763-764 — Processing of the wash oil residues ("wash tar"). In German. 1.00

L 65414 Frames 765-773 — Document and drawing from "Schwelwerk Offleben" (distillation plant Offleben) of the "Braunschweigische Kohlen Bergwerke", Helmstadt. In German. 2.00

L 65415 Frames 774-785 — Installation and production methods of the Lurgi plant for low-temperature carbonization of crude lignite at Brüx. In German. 1.00

L 65416 Frames 786-794 — Electrical level gage - Model D. In German. 1.00

L 65417 Frames 795-805 — Pressure loss in pipe lines. In German. 1.00

L 65418 Frames 806-821 — "Lurgi Spülgas" low-temperature carbonization plant. In German. 2.00

L 65419 Frame 822 — Flow diagram for the low-temperature carbonization plant. In German. 1.00

Frame 823 — This frame is missing.

Miscellaneous Chemicals (contd)

L 65430 Frames 824-864 — CO_2 washing plant. In German. Several frames are missing due to faulty numbering. The text is complete, though difficult to read in places. — 1.00

L 86742 Frames 865-880 — Steam-stripping, springing, dehydration and distillation plant (for phenols). Building 342-344. In German. Difficult to read. Frames 871-879 are missing due to faulty numbering. — 2.00

L 65421 Frames 881-887 — Removal of CO from crude hydrogen at Brüx. In German. — 1.00

Frame 888 — This frame is missing.

L 65422 Frames 889-900 — Winkler plant - Brüx. Building 55 (generators), building 58 (centrifugal dust removers) and building 66 (blowers). In German. — 1.00

Frame 901 — This frame is missing.

L 65423 Frames 902-920 — Wash oil and middle oil distillation at Brüx. In German. — 2.00

L 65424 Frame 921 — Steam flow diagram. In German. — 1.00

L 65425 Frame 922 — Condenser water flow diagram. In German. — 1.00

Frame 923 — This frame is missing.

L 65426 Frames 924-936 — Pressure converters. In German. — 1.00

L 65427 Frame 937 — Plant flow-diagram. In German. — 1.00

L 65428 Frames 938-957 — Turbine dryer ("Büttner"). In German. — 2.00

L 65429 Frames 958-961 — The turbine dryer in the lignite production. In German. — 1.00

L 65430 Frames 962-969 — "Büttner" turbine dryer (its development. In German. — 1.00

L 65431 Frames 970-979 — Low-temperature carbonization of solid fuels and their importance for the obtaining of liquid fuels. In German. — 1.00

L 65432 Frames 980-984 — Documents and drawings pertaining to the removal of phenols from waste waters by various systems used at coke plants, hydrogenation plants and lignite low temperature carbonization plants. Statement and three drawings concerning dephenolizing of waste waters. In German. — 4.00

L 65433 Frames 985-988 — Description of the plan for a dephenolizing plant, with vertical agitator-washer, according to drawing V 54/34 ("Still" system). In German. — 1.00

L 65434 Frames 989-991 — Description of a dephenolising plant with the "Still" recycling system. In German. — 1.00

L 65435 Frame 992 — Dephenolizing plant, Triecresyl-phosphate system. In German. — 1.00

L 65436 Frames 993-1000 — Present state of the dephenolizing of waste liquor from coal processing plants. In German. — 1.00

L 65437 Frames 1001-1004 — Dephenolizing of industrial waste liquor and oils by the "Phenosolvan" process. In German. — 1.00

L 65438 Frames 1005-1013 — Dephenolizing of low temperature carbonization liquor and recovery of phenol at the Sächsische Werke A. G. In German. — 1.00

L 65439 Frame 1014 — "Phenosolvan" process. In German. — 1.00

L 65440 Frames 1015-1022 — Ten years of phenol recovery from the gas liquor of the coking plants in the Rhine-Westphalia industrial area. In German. — 1.00

L 65441 Frames 1023-1035 — The Emschergenossenschaft, (Emscher Board). In German. — 1.00

L 65442 Frames 1036-1158 — "Emschergenossenschaft" and "Lippeverband" in the years 1925 until 1930. In German. — 9.00

L 65443 Frames 1159-1199 — Catalogs and drawings for Büttner Dryer. Coal drying and cooling (booklet). In German. — 2.00

L 65444 Frames 1200-1219 — The Büttner turbine dryer (pamphlet). In German. — 2.00

L 65445 Frames 1220-1227 — Colors, pastes, sludges of every consistency. (pamphlet) In German. — 1.00

L 65446 Frame 1228 — Lay-out of the U.B. Plant of pit "Elizabeth". In German. — 2.00

L 65447 Frame 1229 — Cross sectional view of Büttner vertical turbine dryers for fine coal. In German. — 2.00

L 65448 Frame 1230 — Cross sectional view of a lignite drying installation with Büttner vertical turbine dryers. In German. — 2.00

L 65450 Frames 1231-1278 — Continuous water gas production according to the re-cycling method with special consideration of the Pintsch-Hillebrand generators. In German. — 4.00

L 65449 Frame 1279 — Cross-section of the FH Wg-plant. In German. — 1.00

L 65451 Frame 1280 — F.H. Water gas plant. In German. — 1.00

L 86741 Frame 1281 — This frame is illegible. — 2.00

L 86743 Frame 1282 — Electro motors in buildings 1 and 7. In German. Illegible. — 2.00

L 65452 Frame 1283 — Generator and regenerator (longitudinal section). In German. — 1.00

L 65453 Frame 1284 — Synthesis gas production from peat. Frontal view of plant. In German. — 1.00

Miscellaneous Chemicals (contd)

L 65454 Frame 1285 — Generator and regenerator (outline). In German. 1.00

L 65455 Frame 1286 — Synthesis gas production from peat. Plan of site. In German. 1.00

L 65457 Frame 1287 — Diagram of the Pintsch-Hillebrand water gas plant. In German. 1.00

L 65456 Frame 1288 — Plant for the low-temperature carbonization of peat with Couper heating system. In German. 1.00

L 65458 Frames 1289-1307 — Synthetic gas from peat. In German. 1.00

L 65459 Frames 1308-1369 — Concerning a process for the recovery of pyrocatechol from lignite tar, large scale use thereof and purification of the technical product. In German. 8.00

L 65371 — Processes and equipment in the field of production of coal and tar derivatives (Index). 1.00

PB L 25622. I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY. Miscellaneous chemical reports of the acid factory and the laboratories of the inorganic department. (Continued from Reel No. C-181, PB 25621) (FIAT Reel C-182 (Frames 859-1703), 16 mm microfilm) Mar 1946. 899 f. Price: Microfilm-$6.00 - Enlargement print-$90.00. The individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $6.00. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

PB Numbers Frames	Title	Price
L 58645 Frames 859-863	Experiments on the production of sulfur from pyrite by roasting with the addition of steam. In German.	$ 1.00
L 58646 Frames 864-886	Status of the experiments in the field of tanning with minerals. In German.	2.00
L 58647 Frames 887-905	Pilot plant experiments for the production of elementary sulfur from pyrite by direct resistance heating. In German.	2.00
L 58648 Frames 906-912	Electrolytic production of zinc dust for hydrogenations and organic reductions. In German.	1.00
L 58649 Frames 913-938	Electrolytic deferrization of aluminum salt solutions on mercury cathodes. In German.	2.00
L 58650 Frames 939-962	Pilot plant experiments for the production of elementary sulfur from pyrite by direct resistance heating. In German.	2.00
L 58651 Frames 963-975	The absorption of sulfur dioxide from roasting gases with zinc oxide and water. In German.	1.00
L 58652 Frames 976-988	Vacuum degasification of the waste liquor in a SO_2 plant. In German.	1.00
L 58653 Frames 989-1008	The ammonium bisulfite process for the production of SO_2, and its effect on the works Lu and Op. In German.	2.00
L 58654 Frames 1009-1021	A lead furnace for the production of hydrogen chloride gas. In German.	1.00
L 58655 Frames 1022-1027	The production of soda from sodium sulfate. In German.	1.00
L 58656 Frames 1029-1039	Experiments on the production of saccharin by the catalytic oxidation of o-toluene sulfamide. In German.	1.00
L 58657 Frames 1040-1051	Production of chromium liquor for tanning purposes at Lu. In German.	1.00
L 58658 Frames 1052-1068	Production of soluble in formic acid chromium oxide by precipitation of chrome alum solutions. In German.	2.00
L 58659 Frames 1069-1088	Recovery of sulfur from gypsum. In German.	2.00
L 58660 Frames 1089-1109	Experiments for the working up of sludge (lead sludge) that is freed from arsenic. In German.	2.00
L 58661 Frames 1110-1124	Compilation of known processes and experiments for the production of SO_2 from roasting gas. In German.	2.00
L 58662 Frames 1125-1138	Experiments for the electrolytic regeneration of alkali sulfate - chromium sulfate solutions. In German.	1.00
L 58663 Frames 1139-1154	Experiments for the production of anhydrous sodium sulfite. In German.	1.00
L 58664 Frames 1155-1180	Separation of arsenic from arsenic containing materials or residues, by sublimation. In German.	2.00
L 58665 Frames 1181-1185	Sodium pyrophosphate ($NaH_xP_2O_7$). In German.	1.00
L 58666 Frames 1186-1195	The energy of activation in SO_x catalysis. In German.	1.00
L 58667 Frames 1196-1202	Testing some processes suggested in the literature for producing sulfur from pyrite. In German.	1.00
L 58668 Frames 1203-1213a	Experiments for obtaining sulfur from sulfur dioxide, using hydrogen. In German.	1.00
L 58669 Frames 1214-1226	Report on technical experiments with hydroxylamine. In German.	1.00
L 58670 Frames 1227-1234	Preparation of aluminum free from iron by pressure hydrolysis of basic aluminum salts. In German.	1.00
L 58671 Frames 1235-1241	Deferrization of aluminum salts with the help of sodium diethyldithiocarbamate. In German.	1.00
L 58672 Frames 1242-1273	Experiments for obtaining concentrated sulfur dioxide by the ammonium sulfite method. In German.	3.00
L 58673 Frames 1274-1295	Processing a waste product containing calcium arsenic from the alizarin sections Lu and Le. In German.	2.00
L 58674 Frames 1296-1320	Preparation of hydroxylamine from sodium nitrite and from sodium bisulfite. In German.	2.00
L 58675 Frames 1321-1325	Producing caustic soda from sodium sulfate. In German.	1.00

Miscellaneous Chemicals (contd)

L 58676 Frames 1326-1332 — Corrosion experiments with several steels under the conditions of the catalytic oxidation of sulfur dioxide. In German. 1.00

L 58677 Frames 1333-1349 — Experiments for processing of lead sludge. In German. 2.00

L 58678 Frames 1350-1360 — Preparation of arsenates from arsenites by electrolytic oxidation. In German. 1.00

L 58679 Frames 1361-1375 — Filtering and drying of fine chrome alum. In German. 1.00

L 58680 Frames 1376-1379 — Anhydrous iron-II-chloride. In German. 1.00

L 65920 Frames 1380-1384 — Producing copper (I)-chloride. In German. 1.00

L 58681 Frames 1385-1409 — Obtaining 100% sulfur dioxide from roasting gases, using solutions of aluminumhydroxychloride as absorbent. In German. 2.00

L 58682 Frames 1410-1443 — Preparing 100% sulfur dioxide from roasting gases using solutions of aluminumhydroxychloride as absorbent. Part II. Technical experiments. In German. 3.00

L 58683 Frames 1444-1457 — Preparation of alkali arsenates by oxidizing arsenites with oxygen or air. In German. 1.00

L 58684 Frames 1458-1474 — Experiments for elimination disturbances resulting from the use of "Heilbronn" rock salt in alkali chlorine electrolysis. In German. 2.00

L 58685 Frames 1475-1484 — Process for preparing lead arsenate. In German. 1.00

L 58686 Frames 1495-1494 — Research in the field of betonite. In German. 1.00

L 58687 Frames 1495-1524 — Catalytic splitting of formide into hydrocyanic acid and water, in the vapor phase. In German. 2.00

L 58688 Frames 1525-1548 — Obtaining 100% sulfur dioxide from roasting gases, using dimethyl formide as absorbent. In German. 2.00

L 58689 Frames 1549-1556 — An American suggestion for producing chlorine without the use of electric current. In German. 1.00

L 58690 Frames 1557-1570 — Experiments on dehydration of sodium sulfide. In German. 1.00

L 58691 Frames 1571-1575 — Testing some zinc salts and basic aluminum salts as to their suitability as fire proofing agents. In German. 1.00

L 58692 Frames 1576-1614 — Producing 100% sulfur dioxide from roasting gases, using solutions of aluminum hydroxychloride as absorbent. In German. 3.00

L 58693 Frames 1615-1621 — Working up sodium sulfate waste liquor (hydroxylamine). In German. 1.00

L 86843 Frames 1622-1626 — Preparing silicon tetrachloride from silicic acid, carbon and chlorine. In German. May reproduce poorly. 2.00

L 58694 Frames 1627-1630 — Reduction of sodium sulfate with the help of sulfur. In German. 1.00

L 58695 Frames 1631-1639 — Laboratory experiments for purifying and concentrating waste sulfuric acid. In German. 1.00

L 58696 Frames 1640-1653 — Obtaining pure SO_2 gas from sulfuric acid and sulfur according to the method by D. Mirew, Sofia. In German. 1.00

L 58697 Frames 1654-1665 — Using chloroprene in rubber mixtures for lining of pipelines and chambers, especially for the alkali chloride electrolysis. In German. 1.00
Frame 1665 is illegible.

L 58698 Frames 1666-1678A — Continuous preparation of hydroxylammonium salts from nitrite and bisulfite. In German. 1.00

L 58699 Frames 1679-1703 — Production of zinc hyposulfite from zinc amalgam and SO_2. In German. 2.00

L 58700 — Miscellaneous chemical reports of the acid factory and the laboratories of the inorganic department. (Index) 1.00

METALS AND METAL PRODUCTS

PB L 17550-3. BÖHLER & CO. A. G. Center wires. (Supplement to PB 17550) (FIAT Final Rept 497, Supp.) n. d. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00
This illustrated pamphlet covers the fields of application, advantages and properties of Böhler B-Elite KVA and KVB welding wire for DC or AC arc welding. In German. Abstract for original German report appears in this Bibliography, v. 1, p. 1340.

PB L 17550-3-2. BÖHLER & CO., A. G. Welding rods and electrodes for high-speed steel welding. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Dec 1944. 15 p. Price: Microfilm-$1.00 - Photostat-$1.00
This pamphlet describes the application of Böhler Rapid and Rapidit welding rods and electrodes in the production and repair welding of milling cutters, etc. Photographs are included. In German.

PB L 17550-3-3. BÖHLER & CO., A. G. High-grade welding rods for arc and oxyacetylene welding. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Sep 1941. 25 p. Price: Microfilm-$1.00 - Photostat-$2.00
This catalog lists Böhler products together with their fields of application, properties, color identification, current consumption, etc. In German.

PB L 17550-3-4. BÖHLER & CO., A. G. Coated electrodes. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Sep 1944. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
A leaflet on the application properties and specifications, for Böhler FOX UME electrodes. In German.

PB L 17550-3-5. HANSA-WERK, G.M.B.H., HAMBURG. Hansa coated electrodes; electrode coatings in paste and powder form; welding rods for oxyacetylene welding; and welding equipment. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). 1944. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00
This catalog and price list includes photographs of welding equipment such as protective shields, goggles, gloves, electrode clamps, cables, etc. In German.

PB L 17550-S-6. HANSA-WERK, G.M.B.H., HAMBURG. Price list 59/40; Hansa electrodes. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). 1940. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00
This price list covers coated electrodes for welding iron, steel, bronze, brass, and copper. In German.

PB L 17550-S-7. HIMMELWERK A. G. TÜBINGEN. Welding equipment. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00
This illustrated pamphlet covers various types of welders and A.C. shunt motors. In German.

PB L 17550-S-8. ELEKTROGEN-INDUSTRIE, G.M.B.H., HAMBURG. Electrogen arc welding equipment. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00
This illustrated pamphlet covers A.C. and D.C. welders, as well as belt-driven and gasoline and diesel engine welders. In German.

PB L 17550-S-9. ELEKTROGEN-INDUSTRIE G.M.B.H., HAMBURG. Price list No. 22; original electrogen electrodes. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
This price list applies to coated electrodes for A.C. and D.C. arc welding. In German.

PB L 17550-S-10. RHEINMETALL-BORSIG, A. G., DÜSSELDORF. Rheinmetall electrodes and welding rods. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 9 p. Price: Microfilm-$1.00 - Photostat-$1.00
This catalog lists Rex coated for heavy-duty and special purpose welding, EVG, DB, and Trumpf electrodes and welding rods for joint welding, AG and EA, electrodes for welding medium and hard steels, and GH and GN electrodes for cast iron welding. In German. See PB 17550-S-11 for an English translation.

PB L 17550-S-11. RHEINMETALL-BORSIG, A. G., DÜSSELDORF. Electrodes and welding wires. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00
This is an English translation of PB 17550-S-10.

PB L 17550-S-12. TEWES, KARL. The welded joint under a microscope. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 26 p. Price: Microfilm-$1.00 - Photostat-$2.00
This publication from Rheinmetall-Borsig A.G. Düsseldorf, discusses the metallography of welds, changes in structure as the result of mechanical and thermal treatment, and the detection of impurities. Graphs and photographs are included. In German.

PB L 17550-S-13. GUTEHOFFNUNGSHÜTTE OBERHAUSEN A. G. Electrodes; welding rods. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Jun 1939. 11 p. Price: Microfilm-$1.00 - Photostat-$1.00
This catalog and price list applies to bare and coated electrodes and welding rods for various purposes. In German.

PB L 17550-S-14. GUTEHOFFNUNGSHÜTTE OBERHAUSEN A. G. GHH electrodes. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Mar 1942. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00
This is a condensed version of PB 17550-S-13.

PB L 17550-S-15. GUTEHOFFNUNGSHÜTTE OBERHAUSEN, A.G. GHH electrodes and welding wires. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Aug 1937. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00
This is a condensed version (in English) of PB 17550-S-16 without price list.

PB L 17550-S-16. GUTEHOFFNUNGSHÜTTE OBERHAUSEN, A. G. GHH electrodes; welding wires. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Aug 1937. 11 p. Price: Microfilm-$1.00 - Photostat-$1.00
This is a translation of an earlier issue of PB 17550-S-13.

PB L 17550-S-17. WESTFÄLISCHE UNION, HAMM, WESTF. Phoenix-Union oxyacetylene welding rods. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Feb 1939. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00
A leaflet listing Phoenix-Union products with their properties and fields of application. In German.

PB L 17550-S-18. MESSER & CO., G.M.B.H., FRANKFURT AM MAIN, GERMANY. "Kopol 250" arc welding transformer. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 15 p. Price: Microfilm-$1.00 - Photostat-$1.00
This pamphlet covers a description, mode of operation and controls for various types of "Kopol 250" welding equipment. In German.

PB L 17550-S-19. MESSER & CO., G.M.B.H., FRANKFURT AM MAIN, GERMANY. "Original Messer" spot welding machines, type PF. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 12 p. Price: Microfilm-$1.00 - Photostat-$1.00
This pamphlet discusses the advantages of adjustable armatures and mode of operation of Messer welders. Photographs included. In German.

PB L 17550-S-20. MESSER & CO., G.M.B.H., FRANKFURT AM MAIN, GERMANY. "Original Messer" acetylene generators for machine shops and industrial use. (Supplement to PB 17550-S-20). (FIAT Final Rept 497, Supp.). n. d. 20 p. Price: Microfilm-$1.00 - Photostat-$2.00
This illustrated pamphlet applies to various types of portable and stationary high-pressure acetylene generators. In German.

PB L 17550-S-21. MESSER & CO., G.M.B.H., FRANKFURT AM MAIN, GERMANY. "Original Messer" flash-back proof cutting torches and gas blowpipes. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 27 p. Price: Microfilm-$1.00 - Photostat-$2.00
This illustrated catalog covers various types of cutting torches, kits, and accessories. In German.

PB L 17550-S-22. MESSER & CO., G.M.B.H., FRANKFURT AM MAIN, GERMANY. Messer oxyacetylene equipment for cutting objects of various shapes and thickness. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 49 p. Price: Microfilm-$1.00 - Photostat-$4.00
This illustrated catalog covers Procop and Secator portable cutters, the Corta universal cutter with "Optoskop" control, etc. in addition to reducing values. In German.

PB L 17550-S-23. MESSER & CO., G.M.B.H., FRANKFURT AM MAIN, GERMANY. Secator portable oxyacetylene cutter with push-button control and tachometer. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00
An illustrated leaflet describing various fields of application for this device. In German.

PB L 17550-S-24. MESSER & CO., G.M.B.H., FRANKFURT AM MAIN, GERMANY. WZH high-pressure acetylene generating plant for welding operations. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00
This leaflet contains a description assembly operating and maintenance instructions for the WZH plant. Photographs and drawings are included. In German.

PB L 17550-S-25. MESSER & CO., G.M.B.H., FRANKFURT AM MAIN, GERMANY. The "Messer" resistance welding and heating machines. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 44 p. Price: Microfilm-$1.00 - Photostat-$3.00
This illustrated catalog covers single, double, and multiple electrode spot welders, seam welders, butt and flash welders, and rivet heaters. In English.

PB L 17550-S-26. MESSER & CO., G.M.B.H., FRANKFURT AM MAIN, GERMANY. Mitra new type Messer sheathed electrode. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00
A leaflet listing the properties and describing applications for this electrode. In German.

PB L 17550-S-27. MESSER & CO., G.M.B.H., FRANKFURT AM MAIN, GERMANY. Price list for welding rods, Nov 1, 1943. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Nov 1943. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 17550-S-28. MESSER & CO., G.M.B.H., FRANKFURT AM MAIN, GERMANY. Messer price and weight list for arc welding electrodes and accessories. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 17550-S-29. DÜRENER METALLWERKE A. G., WERK DÜREN/RHLD. Durana-Elektra, universal electrode bronze for resistance welding. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 11 p. Price: Microfilm-$1.00 - Photostat-$1.00
This pamphlet presents a description and lists the mechanical properties of Durana electrodes. Photographs are included. In German.

PB L 17550-S-30. DÜRENER METALLWERKE A. G., BERLIN. Duralumin and the other Düren light metals. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). 1936. 34 p. Price: Microfilm-$1.00 - Photostat-$3.00
This publication describes and illustrates the many applications of duralumin, duralplat duralumin-K, polital, duralumin-W, duranalium, and "BD" light metal in the aircraft, automotive, and shipbuilding industries, structural engineering, etc. In German.

PB L 17550-S-31. HUGO MIEBACH, DORTMUND. Miebach spot welding equipment. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 14 p. Price: Microfilm-$1.00 - Photostat-$1.00
This illustrated pamphlet covers butt, spot and seam welders, grinders, and welding transformers. In German.

PB L 17550-S-32. HUGO MIEBACH, DORTMUND. Miebach welding equipment. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 37 p. Price: Microfilm-$1.00 - Photostat-$3.00
This catalog applies to butt welders, wheel-rim heating apparatus, bolt heating and upsetting machines, seam and spot welders, rivet heaters, and a point press for multiple spot welding. Photographs are included. In German.

PB L 17550-S-33. WESTDEUTSCHE WERKZEUGMASCHINEN A. G., DÜSSELDORF. Wewag welding equipment. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00
An illustrated pamphlet on spot, seam, and butt welders, and rivet heaters. In German.

PB L 17550-S-34. WENNINGER, GEORG. Electric welding-machine construction. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 17 p. Price: Microfilm-$1.00 - Photostat-$2.00
A pamphlet illustrating spot, seam, and butt welders and bolt and rivet heaters. In German.

PB L 17550-S-35. SIEMENS-SCHUCKERTWERKE A. G., BERLIN. Siemens spot welders WP3, WP4, WP5, and WP6. Description and instructions. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 32 p. Price: Microfilm-$1.00 Photostat-$3.00
This pamphlet presents a description operating and maintenance instructions for the spot welders. Photographs, drawings, and performance charts are included. In German.

PB L 17550-S-36. SIEMENS-SCHUCKERTWERKE, A. G., BERLIN. Electric rivet heater model WE 5, with air and water cooling independent of the freshly-added water. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 12 p. Price: Microfilm-$1.00 - Photostat-$1.00
This pamphlet presents a description, operating and maintenance instructions for the WE5 single-phase A.C. rivet heater. A photograph and wiring diagrams are included. In German.

PB L 17550-S-37. SIEMENS-SCHUCKERTWERKE A. G., BERLIN. Siemens elcctronic welding control switch for spot and seam welders. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00
A leaflet describing the operation of the welding control. Wiring diagrams included. In German.

PB L 17550-S-38. SIEMENS-SCHUCKERTWERKE A. G., BERLIN. Siemens resistance welders. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00
A pamphlet illustrating Siemens spot, seam, and butt welders. In German.

PB L 17550-S-39. SIEMENS-SCHUCKERTWERKE A. G., BERLIN. Siemens welding transformer for continuous manual welding operations. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00
A leaflet describing the transformer and its applications. Photographs are included. In German.

PB L 17550-S-40. SIEMENS-SCHUCKERTWERKE A. G., BERLIN. Siemens welding transformer LE88G D.C. circuits. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
A leaflet describing the construction of the LE88 transformer. (Range 45A, 15V to 250A, 25V). In German.

PB L 17550-S-41. SIEMENS-SCHUCKERTWERKE A. G., BERLIN. Siemens electric welding equipment for machine shops. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). 1 p. Price: Microfilm-$1.00 - Photostat-$1.00
A leaflet illustrating several types of butt and spot welders. In German.

PB L 17550-S-42. SIEMENS-SCHUCKERTWERKE A. G., BERLIN. Welding transformer LE 148 for LE148R A.C. circuits and LE 1480 D.C. circuits. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
A leaflet describing the construction of the LE 148 transformer (range 70A, 25V to 420A, 30V). In German.

PB L 17550-S-43. SIEMENS-SCHUCKERTWERKE A. G., BERLIN. Siemens welding transformer LE178R for A.C. circuits. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
A leaflet describing the LE178R dual transformer for selective welding (2 positions 45A, to 250A, 25V or 1 position to 500A, 35V). In German.

PB L 17550-S-44. SIEMENS-SCHUCKERTWERKE A. G., BERLIN. Welding transformer LE 148 for LE 108R A.C. circuits or LE1080 D. C. circuits. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
A leaflet describing the construction of the LE 148 transformer (range 60A, 15V, to 300A, 30V). In German.

PB L 17550-S-45. SIEMENS-SCHUCKERTWERKE A. G., BERLIN. Siemens automatic butt welder type WS 81s/160. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00
This leaflet contains a description and operating instructions. A photograph and several drawings are included. In German. See also PB 17550-S-51.

PB L 17550-S-46. SIEMENS-SCHUCKERTWERKE A. G., BERLIN. Siemens arc welding transformers. (Supplement to PB 17550). (FIAT Final Rept 497, Supp). n. d. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00
This leaflet, a reprint from "Elektrowärme" vol. 8, 1936, contains a description of the Siemens transformers. In German.

PB L 17550-S-47. WILBERT, H. Designs and fields of application for electric seam welders. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00
This Siemens-Schuckert pamphlet contains descriptions of various types of welders and welding controls and discusses their applications. Photographs are included. In German.

PB L 17550-S-48. SCHEURING, W. and HAAS, K. New perceptions of the capacities of welders. (Supplement to PB 17550) (FIAT Final Rept 497, Supp.). 8 p. Price: Microfilm-$1.00 - Photostat-$1.00
This is a Siemens-Schuckertwerke reprint from "Elektroschweissung" vol. 10, No. 10,1949. A study was made of D.C. arc welding with bare, coated, and sheathed electrodes in an attempt to outline welding capacities of various types of equipment. Graphs are included. In German.

PB L 17550-S-49. HOCH, FRIEDRICH VON. Electric spot welding. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). 1937. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00
This Siemens-Schuckertwerke reprint from "Elektroschweissung" vol. 8, No. 2, 1937, discusses the development of spot welding equipment to meet requirements of sheet metal-working industries. Photographs and drawings are included. In German.

PB L 17550-S-50. KILGER, H. The significance of upsetting pressure in flash welding. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). 1937. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00
This reprint from "Siemens-Zeitschrift" vol. 17, No. 1, 1937 discusses developments in flash welding technique, and describes several types of Siemens butt welders. Photographs are included. In German.

PB L 17550-S-51. SIEMENS-SCHUCKERTWERKE A. G. Automatic butt welder WS 81s 160. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Jul 1939. 123 p. Price: Microfilm-$3.00 - Photostat-$9.00
This technical publication contains a description, assembly, operating and maintenance instructions for the WS 81s 160 butt welder. Performance charts, drawings, and wiring diagrams are included. In German. See PB 17550-S-45 for a descriptive leaflet on this butt welder.

PB L 17550-S-52. SIEMENS-SCHUCKERTWERKE A. G. Description and operating instructions for the WPW 80d/150 projection welder. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Mar 1943. 38 p. Price: Microfilm-$1.00 - Photostat-$3.00
This publication contains a description, operating and maintenance instructions for the WPW 80d 150 machine for multiple spot welding of sheet iron. Drawings are included. In German.

PB L 17550-S-53. SIEMENS-SCHUCKERTWERKE A. G. Description and operating instructions for the WP 62d/60 Siemens spot welder. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Jul 1942. 32 p. Price: Microfilm-$1.00 - Photostat-$3.00
This publication pertains to a spot welder for light metals with a constant discharge of 400 mm. Drawings and wiring diagrams are included. In German.

PB L 17550-S-54. SIEMENS-SCHUCKERTWERKE A. G. Description and operating instructions for the WP 72d/100 Siemens spot welder. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Jul 1940. 33 p. Price: Microfilm-$1.00-Photostat-$3.00
This publication to a spot welder for light metals with a constant discharge of 500-1000 mm. Drawings and wiring diagrams are included. In German.

PB L 17550-S-55. SIEMENS-SCHUCKERTWERKE A. G. Description and operating instructions for WN 73 PP/L special welding equipment. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Apr 1942. 32 p. Price: Microfilm-$1.00 - Photostat-$3.00
This publication covers a duplex spot welder. Drawings and wiring diagrams are included. In German.

PB L 17550-S-56. SIEMENS-SCHUCKERTWERKE A. G. Description and operating instructions for the Siemens WP 82d/150 spot welder. (Supplement to PB 17550) (FIAT Final Rept 497, Supp.) Jan 1944. 35 p. Price: Microfilm-$1.00 - Photostat-$3.00
This welder, with a constant discharge of 650-1200 mm, was designed for light metal-welding in the aircraft and automotive industries. Drawings and wiring diagrams are included. In German.

PB L 17550-S-57. SIEMENS-SCHUCKERTWERKE A. G. Instructions for disassembly of the WS 825 automatic butt welder. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Jul 1939. 40 p. Price: Microfilm-$1.00 - Photostat-$3.00
Drawings are included. In German.

PB L 17550-S-58. SIEMENS-SCHUCKERTWERKE A. G. Description and operating instructions for the WN 92d/200 heavy-duty seam welder. (Supplement to PB 17550). (FIAT Final

Rept 497, Supp.). Oct 1942. 48 p. Price: Microfilm-$1.00 - Photostat-$4.00
This automatic machine was designed for use as a tight seam welder and as a roll welder. Drawings and wiring diagrams are included. In German.

PB L 17550-S-59. SIEMENS-SCHUCKERTWERKE A. G. Description and operating instructions for Z 42 supplementary equipment for LAN 40 automatic welders. (Supplement to PB 7550). (FIAT Final Rept 497, Supp.). Nov 1943. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00
This welding equipment is intended for producing welding seams of arbitrary length, using sheathed electrodes of 4-5 mm diameter, and 450 mm. in length. In German.

PB L 17550-S-60. SIEMENS-SCHUCKERTWERKE A. G. Siemens butt welders WS5, WS6, WS7, and WS7a. Description and operating instructions. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 9 p. Price: Microfilm-$1.00 - Photostat-$1.00
These instructions apply to manually operated welding equipment. In German.

PB L 17550-S-61. SIEMENS-SCHUCKERTWERKE A. G., NÜRNBERGER WERK. Fixed and movable clamping device; pressure cylinder and carriage assembly. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Feb 1942. 16 p. Price: Microfilm-$1.00 - Photostat-$2.00
Drawing.

PB L 17550-S-62. SIEMENS-SCHUCKERTWERKE A. G., NÜRNBERGER WERK. E IIaS SC 49417. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Jun 1944. 32 p. Price: Microfilm-$1.00 - Photostat-$3.00
Two drawings for EIIaS welding equipment.

PB L 17550-S-63. SIEMENS-SCHUCKERTWERKE A.G., NÜRNBERGER WERK. Wheel rim welding equipment; scale drawing. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). May 1936. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 17550-S-64. SIEMENS-SCHUCKERTWERKE A. G., NÜRNBERGER WERK. RWS 50 welding equipment; assembly drawing. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Mar 1943. 15 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 17550-S-65. SIEMENS-SCHUCKERTWERKE A. G., NÜRNBERGER WERK. WS 101 S/750 (ws 10) motor-driven welder; assembly-plan view. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). Mar 1942. 16 p. Price: Microfilm-$1.00-Photostat-$2.00

PB L 17550-S-66. SIEMENS-SCHUCKERTWERKE A. G., NÜRNBERGER WERK. Electric pipe welding equipment for pipes to 40 mm diameter; drawing scale 1:20. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). 1942. 12 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 17550-S-67. KELLER & KNAPPICH, G.M.B.H., MASCHINEN-FABRIK, AUGSBURG. KUKA electric welding equipment. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
A leaflet with two photographs.

PB L 17550-S-68. KELLER & KNAPPICH, G.M.B.H., MASCHINEN-FABRIK AUGSBURG. KUKA welding equipment. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00
An illustrated leaflet on KUKA universal spot and butt welders In German.

PB L 17550-S-69. KELLER & KNAPPICH G.M.B.H., MASCHINEN-FABRIK AUGSBURG. The new "K2" spot welder. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
An illustrated leaflet. In German.

PB L 17550-S-70. KELLER & KNAPPICH G.M.B.H., MASCHINEN-FABRIK AUGSBURG. Kuka manually-operated welders. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00
An illustrated leaflet on manually-operated spot and butt welders for apparatus and signal equipment construction. In German.

PB L 17550-S-71. KELLER & KNAPPICH G.M.B.H., AUGSBURG. Electric butt welder. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00
An illustrated leaflet on a manually operated automatic butt welder. In German.

PB L 17550-S-72. RUD-KETTENFABRIK RIEGER & DIETZ. Rud tire chains. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 16 p. Price: Microfilm-$1.00 - Photostat-$2.00
This illustrated booklet contains instructions for mounting Rud tire chains. In German.

PB L 17550-S-73. RIEGER & DIETZ, UNTERKOCHEN WÜRTT. "Rud" caterpillar track-type tire chains. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). n. d. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00
This illustrated leaflet covers tire chains for dual-axle trucks. In German.

PB L 17550-S-74. RIEGER & DIETZ, KETTENFABRIK. UNTERKOCHEN, WÜRTT. Hand-forged and electrically welded commercial chains for agricultural and industrial use and for forestry. (Supplement to PB 17550). (FIAT Final Rept 497, Supp.). 1875-1925. 42 p. Price: Microfilm-$1.00 - Photostat-$3.00
This is an illustrated catalog covering various types of chains, links, and holding devices. In German.

*PB L 86141. CARTER, W. A. Production engineering research in Germany. (BIOS Final Rept 1519, Item 31). Jan-Mar 1946. 56 p. Price: Microfilm-$2.25 - Photostat-$6.00
This report covers an investigation of German facilities for production engineering research, and the results of research work for the economic benefit of German industry. Seventeen factories were visited and an individual report is given on each factory covering such subjects as: rough machinery; fine finishing; tools and tool materials; machinability of materials; metal cutting methods; cutting fluids and their effect; machining tests; metallurgy; and fundamental and practical research.

*PB L 86266. MOON, A. RAMSAY and WECK, R. Construction and testing of welding structures in Germany, with particular reference to fatigue testing. (BIOS Final Rept 1086, Item 31). Aug 1946. 42 p. Price: Microfilm-$2.00 - Photostat-$5.00

The object of the investigations described in this report was to ascertain what progress had been made in Germany in the design, construction and investigation of welded structures with particular reference to the endurance of such structures under repeated loading. There were three topics of prime interest: 1) The advances made in the construction of welded bridges and the results of research upon which their design was based; 2) Researches relating to welded pressure vessels; 3) Equipment suitable for the fatigue testing of full scale structures and components. Eight factories were visited and an individual report on each firm is presented. A schematic diagram and sketches are included.

* PB L 85689. HUTCHINGS, R. G. German aircraft heat exchanger equipment. (BIOS Final Rept 1339, Item 25) n. d. 49 p. Price: Microfilm-$2.00 - Photostat-$5.00

Eleven firms were visited to examine German design and manufacturing methods for heat exchanger equipment in general and in particular as applied to light alloy equipment. Due to the almost entire lack of copper, the German radiator and oil cooler industry was forced, in conjunction with German research establishments, to develop light alloy equipment which for the sake of clarity can be separated into two headings: (a) those in production at the end of hostilities, and (b) those which were developed to a stage where production was being considered. Under heading (a) two types of radiator matrix were being produced; under heading (b) the most advanced radiator matrix developments were being made by the firm Zarges of Weilheim, who appears to have attained a measure of success in the fusion bonding of aluminum corrugations or fins and tubes. It is not intended in this report to duplicate information contained in the earlier report "German and French Radiators and Oil Coolers for Aeronautical and Automotive Purposes" but to detail more fully the radiator and oil cooling types and manufacturing processes. Twenty sketches, and a list of welding and brazing materials are included. Another research item of particular interest was the determination of specific heat, viscosity and specific gravity of engine lubricating oil to specification D.T.D. 2472. These curves are included in Appendix (Section IV).

PB L 85128. U. S. OFFICE OF TECHNICAL SERVICES. Soldering small brass parts. (Tech Advisory Service Rept 58.33) Oct 1947. 2 p. Price: Mimeo-10¢

This TAS bulletin lists the properties of six different solders and states that failure in soldering can be greatly reduced by their use. It states further that all solders listed, in order to make a good bond, must be heated sufficiently that all of the metal is liquid, i. e., heated to the higher or complete liquid temperature mentioned, and be allowed to cool undisturbed until the lower or complete solidification temperature is reached.

PHOTOGRAPHIC AND OPTICAL GOODS (INCLUDING PHOTOGRAPHIC PROCESSING)

PB L 76176. HEINE. Drawing index of Leitz (Ernst) G.m.b.h., Wetzlar, Ger. included in FIAT Microfilm Reels numbered PB 73001 through PB 73196 inclusive. (Text in German). Jul 1946. 279 p. Price: Microfilm-$6.00 - Photostat-$19.00

This FIAT microfilm reel contains an explantion of the card file system used by the Ernst Leitz G.m.b.H. and a numerical index of drawings microfilmed by FIAT in Leitz plants at Wetzlar and included in PB 73001-PB 73196. In German.

PB L 73196. LEITZ, ERNST, G.M.B.H., WETZLAR, GERMANY. Calculations and drawings for lenses and optical systems; miscellaneous articles. (FIAT Microfilm Reel N-9, Frames 5615-6775) 1905-1938. 1161 f. Price: Microfilm-$6.00 - Enlargement print-$116.50.

This FIAT microfilm reel consists of calculations and drawings for lenses and optical systems and articles, mostly by C. Metz of the Leitz Optical Works, on miscellaneous optical topics. Individual items are listed below and will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $6.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
5615-5639 PB L 73196	Draft for an article on step micrometers by C. Metz and its reprint from the "Zeitschrift für wissenschaftliche mikroskopie und für mikroskopische Technik," vol. XXIX, 1912, pp. 72-78. In German.	$2.50
5640-5653 PB L 73196	Article on binocular drawing apparatus. By C. Metz. n.d. In German.	1.50
5654-5665 PB L 73196	Drawing apparatus attached to a telescope. n.d. In German. Drawings, photograph and notes.	1.50
5666-5681 PB L 73196	Binocular tube for a special microscope used in connection with a micromanipulator. 1910. In German. Drawings, data and calculations.	2.00
5682-5762 PB L 73196	Optics for a special stereoscope. 1916. In German. Drawings, notes and calculations. Some frames will not reproduce well.	8.50
5763-5802 PB L 73196	Stereoscopic microscope for specimen preparation. n.d. In German. Drawings and calculations. A number of frames indistinct.	4.00
5803-5806 PB L 73196	Copy of a Carl Zeiss, Jena Germany, Pat. application Z14124 for a microscope ocular. 1923. In German.	1.50
5807-5825 PB L 73196	Leitz pamphlet on trichinoscopes. 1930. In German.	2.00
5826-5954 PB L 73196	Material for the revision of a pamphlet on microscopes. By Hager - Tobler. n.d. In German.	13.00
5955-5991 PB L 73196	Article on counting fat globules in milk and the determination of their size. By C. Metz. n.d. In German.	4.00
5992-6014 PB L 73196	Periplanatic ocular 3x to 10x for micro-projection. n.d. In German. Calculations.	2.50
6015-6059 PB L 73196	Oculars 10x to 25x. 1938. In German. Calculations and drawings.	4.50
6060-6066 PB L 73196	Article on the calculation of exposure time according to Stolz. n.d. In German.	1.50
6067-6075 PB L 73196	Draft for an article on the investigation of simple lenses. 1919. In German.	1.50
6076-6090 PB L 73196	Study of H. D. condensers. 1932. In German. Drawings and calculations. Some frames will not reproduce well.	1.50
6091-6098 PB L 73196	Draft for a lecture on foci and focal lengths. n.d. In German.	1.50

6099-6127 PB L 73196 — Binocular tube with 30° inclination. 1931. In German. Drawings and calculations. 3.00

6128-6141 PB L 73196 — Magnifier lense for an inclined binocular tube. 1931. In German. Drawing and calculations. 1.50

6142-6172 PB L 73196 — Material for articles on binocular microscopes. By C. Metz. 1924. In German. 3.50

6173-6180 PB L 73196 — Translation of U. S. Pat. Appl. 1,283,884 for a "Microscope." 1915. In German. 1.50

6181-6192 PB L 73196 — LEITZ, ERNST, G.M.B.H., WETZLAR, GERMANY. Stereoscopic microscope. German Patent 368254, Feb 3. 1923. Application L 55049 IX 42 h. Feb 26. 1922. In German. Drawing and correspondence. 1.50

6193-6233 PB L 73196 — Material for an article on projection stereoscopes. By C. Metz. 1905. In German. 4.50

6234-6258 PB L 73196 — Material for an article on binocular microscopes. By C. Metz. 1921. In German. 2.50

6259-6305 PB L 73196 — Material for an article on bacteria counts in milk. By C. Metz. 1925-1926. In German. 5.00

6306-6370 PB L 73196 — Material for an article on periplanatic oculars. By C. Metz. 1921. In German. 6.50

6371-6406 PB L 73196 — Material for an article on dark-field illumination. By C. Metz. 1905. In German. 4.00

6407-6448 PB L 73196 — Article on aplanatic and achromatic condensers. By C. Metz. 1913. In German. 4.50

6449-6487 PB L 73196 — Article on new oculars for aplanatic correction of apochromatic objectives. By C. Metz. 1926. In German. 4.00

6488-6518 PB L 73196 — Draft for a lecture on "hypersene" oil immersion. By C. Metz. 1933. In German. 3.50

6519-6543 PB L 73196 — Hemoglobinometer according to Prof. Dr. Burker. 1918. In German. Notes and sketches. 2.50

6544-6560 PB L 73196 — Draft for an article on the calculation of optical systems. 1921. In German. 2.00

6561-6566 PB L 73196 — Article on counting plates according to Dr. H. Hampert. 1931. In German. 1.50

6567-6636 PB L 73196 — Draft for an article on confocal oculars. By C. Metz. 1908. In German. 7.00

6637-6651 PB L 73196 — Material for an article on drawing apparatus. By C. Metz. 1911. In German. 1.50

6652-6663 PB L 73196 — Material for a book review of "Les ultramicroscopes et les objects ultramicroscopiques" By A. Cotton and H. Mouton. 1906. In German. 1.50

6664-6673 PB L 73196 — Material for an article on projection oculars for microphotography. 1912. In German. 1.50

6674-6725 PB L 73196 — Material for an article on macroscopic drawing apparatus. 1920. In German. 5.50

6726-6775 PB L 73196 — Draft for an article on a large macroscopic drawing apparatus. By C. Metz. 1915. In German. 5.00

PB L 73188. LEITZ, ERNST, G.M.B.H., WETZLAR, GERMANY. Calculations and drawings for objectives and optical systems. (FIAT Microfilm Reel M-1, Frames 1-1033) 1924-1945 1033 f. Price: Microfilm-$6.00 - Enlargement print-$103.50.
This FIAT microfilm reel consists of calculations and drawings for objectives and optical systems as listed below. Individual items will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $6.00. Please include PB and frame numbers when ordering individual items from this microfilm reel.
In German.

Frames	Title	Price
1-35 PB L 73188	Apochromat for oil immersion. f = 2 mm. 91. 50x. n.d. In German. Drawings and calculations.	$3.50
36-191 PB L 73188	Apochromat for oil immersion. f = 3 mm. 1924. In German. Drawings, graphs and calculations.	16.00
192-201 PB L 73188	Objective 5(Metz) A = 0.65. 1939. In German. Drawings, graphs and calculations.	1.50
202-241 PB L 73188	Intermediate optical system with high achromatic enlargement difference. 1939. In German. Drawing, graphs and calculations.	4.00
242-260 PB L 73188	Lens system for the tube of a trichinoscope. f = 220.0 mm. A = 0.027. 1939. In German. Drawings and calculations.	2.00
261-379 PB L 73188	Calculation of an objective. n.d. In German. Data illegible.	12.00
380-395 PB L 73188	Calculation and drawings of an achromatic objective. n.d. In German. Data illegible.	2.00
396-414 PB L 73188	These frame numbers are illegible.	
415-456 PB L 73188	Projection objective for miniature films. f = 50 mm. 1941. In German. Drawing, graphs and calculations.	4.50
457-465 PB L 73188	Intermediate system. f = 250.0 mm. 1939. In German. Calculations.	1.50
466-480 PB L 73188	Leitz prospectus for microscope objectives and eyepieces. 1931. In German.	1.50
481-547 560-576 PB L 73188	Supplementary microscope system with high negative Petzval value. 1939. In German. Drawings, graphs and calculations.	8.50
548-559 PB L 73188	Circular letter to Leica users. 1938. In German.	1.50
577-584 PB L 73188	Drawings pertaining to unidentified patents. n.d. In German.	1.50
585-602 PB L 73188	Alphabetical index of optical literature from 1613 to 1930. n.d. In German.	2.00
603-616 PB L 73188	Unidentified drawings of objectives. n.d. In German.	1.50

Photographic and Optical Goods (contd)

617-679
PB L 73188 Micro-anastigmat f1 6.3. n.d. In German. 6.50
Drawings and calculations.

680-768
PB L 73188 Microscope objective 45:1. A= 0.65. n.d. In German. 9.00
Drawing, graphs and calculations.

769-835
PB L 73188 Microscope objective 4:1. A= 0.10. f= 28.6 mm. 1945. In German. 7.00
Drawings and calculations.
Some frames may not reproduce well.

836-997
PB L 73188 Microscope objective 25:1. A= 0.65. 1945. In German. 16.50
Drawings, graphs and calculations.

998-1001
PB L 73188 Binocular microscope tube, inclination 45°. n.d. In German. 1.50
Drawings and calculations.

1002-1033
PB L 73188 Periplanatic oculars, 20x, with high exit pupil. 1945. In German. 3.50
Drawings and calculations.

TEXTILES AND TEXTILE PRODUCTS

PB L 67563-S. KOHORN, OSCAR & CO., LTD., tr. Birth of a rayon staple fiber plant. (A translation of the German sound track which accompanied the German film, "Birth of a rayon staple fiber plant") n. d. 8 p. Price: Mimeo-25¢
The sound film from which this commentary is taken was made by the Phrix Company showing the building and operation of its newest staple plant, Wittenberge-on-the-Elbe. The Nazi government financed this new plant by using straw where the other and normal sources of cellulose failed, to the extent of 400 tons a day and producing approximately 120 tons of finished fiber. The film has now been provided with English subtitles and reproduced for use as a silent film.

PB L 85168. KOHORN, OSCAR VON and COSTA, JOSEPH L. Spinning, after-treatment and auxiliary equipment for staple fibre viscose rayon plants in Germany. (FIAT Final Rept 937) Jun 1947. 174 p. Price: Mimeo-$4.50
Staple fiber plants and machine manufacturers in British, French and American occupational zones were investigated and the latest types of spinning, after-treatment, cutting and drying machines in use are described and illustrated through assembly and cross-section drawings and photographs. Available detail drawings are listed. A section on utility and raw material consumption in production, and one on carbon bisulfide recovery systems are included. Continuous sodium sulfate crystallizers are briefly described. Photographs and diagrams are included.

PB L 81741. OESER, W. Working of the cotton card and its mathematical concepts. Jul 1947. 4 p.
Price: Microfilm-$1.00 - Photostat-$1.00
The development of a method for the evaluation of carding intensity is traced. The measure suggested for use is the ratio of the number of wire points on the cylinder to the inches of fiber spread on the cylinder (wire points/inch of fiber length). The density of the wire clothing and the fineness of the raw material are considered in the evaluation. Translated from the German by John F. Krasny and published in the Textile Research Journal, July 1947.

TRANSPORTATION EQUIPMENT

AERONAUTICS

PB L 85382. U. S. AERONAUTICAL BOARD. Belts; troop and turret gunner's safety. (Army-Navy Aeronautical Specification AN-B-27). May 1947. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 21236-A3. U. S. AERONAUTICAL BOARD. Cable; steel (carbon), flexible, preformed, (with amendment 3). (Army-Navy Aeronautical Specification AN-RR-C-43, Amendment 3). Jul 1947. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 21237-A4. U. S. AERONAUTICAL BOARD. Cable; steel (corrosion-resisting), flexible, preformed, (with Amendment 4). (Army-Navy Specification AN-RR-C-48, Amendment 4). Jul 1947. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 85381. U. S. AERONAUTICAL BOARD. Fuel; grade JP-1, aircraft engine. (Army-Navy Aeronautical Specification AN-F-32a). Jul 1947. 10 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 21421-A2. U. S. AERONAUTICAL BOARD. Hose; self-sealing, fuel (aromatic resistant), (with amendment 2). (Army-Navy Aeronautical Specification AN-H-27). Jul 1947. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 21448-A2. U. S. AERONAUTICAL BOARD. Instruments and instrument boards; installation of, (with amendment 2). (Army-Navy Aeronautical Specification AN-I-2a, Amendment 2). Aug 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 21560-R. U. S. AERONAUTICAL BOARD. Pipe threads; taper, aeronautical national form, symbol ANFT. (Revision of PB 21560). (Army-Navy Aeronautical Specification AN-P-363). May 1947. 23 p. Price: Microfilm-$1.00 - Photostat-$2.00

PB L 21619-A3. U. S. AERONAUTICAL BOARD. Regulator assembly; brightness control, (with amendment 3). (Army-Navy Aeronautical Specification AN-R-17, Amendment 3). 4 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 21765-R. U. S. AERONAUTICAL BOARD. Tubing; chrome-molybdenum (4130) steel seamless. (Revision of PB 21765). (Army-Navy Aeronautical Specification AN-T-69). Jul 1947. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 21766-R. U. S. AERONAUTICAL BOARD. Tubing; chrome-molybdenum (4135) steel seamless. (Revision of PB 21766). (Army-Navy Aeronautical Specification AN-T-68). Jul 1947. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 85379. U. S. AERONAUTICAL BOARD. Tubing; chrome-nickel-molybdenum (8630) steel seamless. (Army-Navy Aeronautical Specification AN-T-15a). Jul 1947. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 85380. U. S. AERONAUTICAL BOARD. Tubing; chrome-nickel-molybdenum 8735, steel seamless. (Army-Navy Aeronautical Specification AN-T-22a). Jul 1947. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00

Transportation Equipment (contd)

PB L 80791-R. U. S. AERONAUTICAL BOARD. Bushing - Type XII-J drive adapter. (Revision of PB 80791). (Army-Navy Aeronautical Standard Drawing AN 4141, rev.). May 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 26286-R4. U. S. AERONAUTICAL BOARD. Circuit breaker - switch type non trip free. (Army-Navy Aeronautical Standard Drawing AN3150). May 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 26361-R. U. S. AERONAUTICAL BOARD. Clamp - Primer line. (Revision of PB 26361). (Army-Navy Aeronautical Standard Drawing AN 4032, rev.). Aug 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 85374. U. S. AERONAUTICAL BOARD. Flange - Type XVI accessory drive. (Army-Navy Aeronautical Standard Drawing AN 4139). Jun 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 85383. U. S. AERONAUTICAL BOARD. Protector - Propeller shaft, plastic. (Army-Navy Aeronautical Standard Drawing AN 4163). Jul 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 80777. U. S. AERONAUTICAL BOARD. Switch - class E limit. (Army-Navy Aeronautical Standard Drawing AN3234). Jun 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 26751-R2. U. S. AERONAUTICAL BOARD. Bosses-pipe-thread, internal standard dimensions for. (Army-Navy Aeronautical Standard Drawing (Design) AND 10053). Jun 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 85375. U. S. AERONAUTICAL BOARD. Drives - Turbo-jet engine accessory (2499 or less thrust pounds). (Army-Navy Aeronautical Standard Drawing (Design) AND 10231). Jul 1947. 1 p. Price: Microfilm-$1.00-Photostat-$1.00

PB L 85372. U. S. AERONAUTICAL BOARD. Drives - Turbo-prop engine accessory (1999 or less guaranteed fuel consumption pounds per hour). (Army-Navy Aeronautical Standard Drawing (Design) AND 10227). Jul 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 85371. U. S. AERONAUTICAL BOARD. Drives - Turbo-prop engine accessory (2000 to 4499 guaranteed fuel consumption pounds per hour). (Army-Navy Aeronautical Standard Drawing (Design) AND 10228). Jul 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 85370. U. S. AERONAUTICAL BOARD. Drives - Turbo-prop engine accessory (4500 or more guaranteed fuel consumption pounds per hour). (Army-Navy Aeronautical Standard Drawing (Design) AND 10229). Jul 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 85377. U. S. AERONAUTICAL BOARD. Drives - Turbo-jet engine accessory (2500 to 4999 thrust pounds). (Army-Navy Aeronautical Standard Drawing (Design) AND 10232). Jul 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 85373. U. S. AERONAUTICAL BOARD. Drives - Turbo-jet engine accessory (5000 or more thrust pounds). (Army-Navy Aeronautical Standard Drawing (Design) AND 10233). Jul 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 85376. U. S. AERONAUTICAL BOARD. Drive - type XX engine accessory. (Army-Navy Aeronautical Standard Drawing (Design) AND 20010). Jun 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 85378. U. S. AERONAUTICAL BOARD. Reference chart - Aircraft engine accessory drives. (Army-Navy Aeronautical Standard Drawing (Design) AND 10230). Apr 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

WATER SUPPLY, SANITATION AND PUBLIC HEALTH

* PB L 85166. GOETZ, ALEXANDER. Materials, techniques and testing methods for the sanitation (bacterial decontamination) of small-scale water supplies in the field, used in Germany during and after the war. (FIAT Final Rept 1312) Dec 1947. 22 p. Price: Mimeo-75¢

The report is divided into three sections, and reviews the following investigations: (I) Methods developed in Germany during the war for water filtration by means of expendable filter agents ("Anschwemmfilter") which remove suspended matter, iron and micro-organism, etc., in one and the same operational phase. In contra-distinction to the diatomaceous earth filter powders, these materials represent "mixtures" of cellulose pulp, diatomaceous earth, and coagulants incorporated into the latter, which also produce coherence of the filter cake and adhesion of the cake on the filter screen. (II) The practical application and methods of using heavy metals (in particular, silver) for the sanitation of polluted waters--"Micropur" of the Katadyn G.m.b.H. Deviating entirely from the customary electro-chemical application of Ag to water, this method has been developed during the war, particularly for very small ambulant units (1-10 liters) in batch treatment, in order to provide field personnel with reliable sanitary drinking water with a minimum of weight and bulk of equipment and supplies required. (III) The use of nitrocellulose filter membranes of remarkably uniform controlled pore sizes for the simple and rapid recognition and quantitative determination of E. Coli and water-borne pathogenic bacteria. Specially designed apparatus for the routine use of this method permits the quantitative retention (and concentration) of the organisms from large quantities of liquids upon small surface areas. Techniques are described which have been developed in Germany (and Russia) for culturing these organisms upon these membranes and also for differential staining in situ, permitting easy counting techniques, and thus representing a substantial saving of manipulation, necessary glassware, and of total time required. It is possible to culture differentially from the same membrane.

PB L 73956. JUNG, HERMAN and SCHROEDER, WALTER. The "Niers" process. (FIAT Microfilm Reel AA 233, Frames 1-47). 1940. 47 f. Price: Microfilm-$1.25 - Enlargement Print-$5.00

The chemical process for purifying waste water, called "Niers" process, (a small tributary of the lower Rhine), uses iron filings for the precipitation of dirt. The action and process is described, and some examples of application are given. In German.

PB L 85993. CURRY, HASKELL B. and WYATT, WILLA A. A study of inverse interpolation of the Eniac. (Aberdeen Proving Ground Ballistic Res Lab Rept 615) Aug 1946. 99 p. Price: Microfilm-$3.25 - Photostat-$10.00
A study is made of methods of using the Eniac to convert a table giving values of two functions $x(t,\phi)$, for evenly spaced values of t and ϕ into a table giving t for evenly spaced values of x and ϕ. At the same time there may be additional functions of t and ϕ to be expressed in terms of x and ϕ. A basic scheme for doing this is set up and programmed in detail. This scheme contains three additional functions y, z, w. The basic scheme is such as to be readily modified; some modifications are studied and programmed in somewhat less detail than the basic scheme.

PB L 70064. I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY. Reports in the field of analytical chemistry and machinery. (FIAT Microfilm Reel G 24, Frames 1873-2761) 1926-1932. 887 f. Price: Microfilm-$6.00 - Enlargement print-$89.00.
This reel was prepared by FIAT investigators in Germany. 24 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
1873-2350 PB L 70064	Analytic determination methods for inorganic and organic material. 1926-1929. In German.	$48.00
2351-2398 PB L 70064	Sensitivity of analytic methods to determine smallest amounts of substances. By Grassner and Neukirch. Feb 3, 1930. In German.	5.00
2399-2404 PB L 70064	Determination of copper manganite in mixtures of Cu O and Mn O 2. By Riebeth. Mar 3, 1930. In German.	1.50
2405-2421 PB L 70064	Spectrum analysis of lead samples. By Gromann. Mar 31, 1930. In German.	2.00
2422-2439 PB L 70064	Examination of drinking water containing sulfite. By Wesly. Jun 25, 1930. In German.	2.00
2440-2444 PB L 70064	Reaction of "Glysantin" anti-freeze in warm water heating installation. By Kraemer. Jul 17, 1930. In German.	1.50
2445-2467 PB L 70064	Refractometry in analytical chemistry. By Neukirch and Doepke. Dec 17, 1930. In German.	2.50
2468-2483 PB L 70064	Boiler feed water degassing in Oppau. By Wesly. Dec 20, 1930. In German.	2.00
2484-2491 PB L 70064	Molecular weight determination according to the boiling method. By Pfundt. Jan 24, 1931. In German.	1.50
2492-2506 PB L 70064	Determination of ammonia nitrogen. By Pfundt. Feb 5, 1931. In German.	1.50
2507-2530 PB L 70064	Determination of nitrogen in pure cyanates and mixtures of cyanates with other nitrogenous salts. By Riebeth. Feb 20, 1931. In German.	3.50
2531-2588 PB L 70064	Determination of traces of mercury. By Grassner. Mar 5, 1931. In German.	6.00
2589-2607 PB L 70064	Gas analysis methods. By Wetzel and Wustrow. Mar 1931. In German.	2.00
2608-263. PB L 70064	Electrometric titrations. By Pfundt. Apr 29, 1931. In German.	2.50
2633-2645 PB L 70064	Preparation of boiler feed water for a projected high pressure boiler. By Pfleiderer and Wesly. Aug 20, 1931. In German.	1.50
2651-2672 PB L 70064	Steam splitting in a 100 atm. experimental boiler. By Wesly and Ernst. Oct 1931. In German.	2.50
2673-2676 PB L 70064	Determination of nitrogen in creosote oils. By Grassner. Nov 14, 1931. In German.	1.50
2677-2690 PB L 70064	Determination of carbon dioxide traces in pure air for Linde plants. By Grassner. Nov 26, 1931. In German.	1.50
2691-2716 PB L 70064	Detection of traces of silver. By Lucas and Grassner. Feb 15, 1932. In German.	3.00
2717-2724 PB L 70064	Rapid determination method for halogen and sulfur. By Hahn. Mar 1932. In German.	1.50
2725-2739 PB L 70064	Analysis of amines. By Fleming and others. Jul 5, 1932. In German.	1.50
2740-2755 PB L 70064	Determination of ammonia, mono-, di-, and trimethylamine. By Wustrow and Wetzel. Sep 30, 1932. In German.	2.00
2646-2650 PB L 70064	Corrosion of monel metal by ammonium carbamate melt. By Grassner. Sep 17, 1931. In German.	1.50
2756-2761 PB L 70064	Explosion limits of gas-air or steam-air mixtures. n.d. In German.	1.50

PB L 70064-S. I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY. Reports in the field of analytical chemistry and machinery. (FIAT Microfilm Reel G 24, Frames 1873-2761, abstract cards) 1926-1932. 24 p. Price: Microfilm-$1.00 - Photostat-$2.00
Brief abstracts of the individual items on the above reel, G 24, PB L 70064, prepared by FIAT personnel in Germany.

PB L 81338. JOHNSON, M. W. and JOHNSTON, T. F. Ambient water noise in the Central and South Pacific. (Calif Univ Div War Res Rept UCDWR M84) n.d. 61 p. Price: Microfilm-$2.50 - Photostat-$7.00
Measurements of underwater ambient noise were made in four areas in the Pacific: Funafuti; Noumea, New Caledonia; Guadalcanal-Russell Island; Hawaiian Islands. The most generally distributed and persistent biological underwater noise encountered in all of the areas visited by this survey was the characteristic crackle of snapping shrimp. It occurred regularly with high spectrum levels at all shallow water measuring stations over (or near) coral or shell bottoms. The average of the 10, 15, 20 kc spectrum levels over these noise sources (shrimp beds) ranged from 29 db to 45 db above 0.0002 dyne/cm^2 with an average of about 35 db for all areas. This average is about 25 db above deep sea water noise at 15 kc, sea state one. Characteristically, the shrimp noise rises above the water noise at frequencies above 1 kc. Outward from the shrimp beds the decrease in spectrum level (10 - 20 kc) is about three to four db per distance double. A comparison with shrimp noise spectra of other areas shows maximum spectrum levels as follows: Central and Southwest Pacific at 7 kc, San Diego at 3 to 4 kc; Florida - Bahamas at 10 kc. Sporadic noises of soniferous fishes or other animals were often encountered in each of the four areas surveyed.

Miscellaneous (contd)

Deep sea water noise spectra were essentially the same as those reported for other areas. The average spectrum had a downward slope of 5 db/octave with a level at 1 kc of 31 db.

PB L 81682. U. S. ARMY SERVICE FORCES. Manpower utilization report on work measurement. Jun 1946. 24 p. Price: Microfilm-$1.50 - Photostat-$3.00

This report summarizes the experience of the Army Service Forces with work measurement. It describes briefly the principles on which the ASF work measurement program is based and discusses the benefits which were derived from the program. It includes suggested applications of work measurement and examples of the use of work measurement data in specific cases.

PB L 81683. U. S. ARMY SERVICE FORCES. Manpower utilization report on work simplification. May 1944. 55 p. Price: Microfilm-$2.25 - Photostat-$6.00

This report is intended as a guide for Army Service Forces Management in simplifying materials handling operations. It provides a pattern for extension of the Army Service Forces work simplification program within individual commands. It includes new data on techniques and new case studies.

PB L 82124. U. S. OCCUPATION FORCES IN GERMANY. WEATHER SERVICE, BAD KISSINGEN, GERMANY. Publications in meteorology and electric communications. (FIAT Microfilm Reel Y 51, Frames 528-992) 1940-1943. 465 f. Price: Microfilm-$7.00 - Enlargement print-$49.00

This reel was prepared by FIAT investigators in Germany. Individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $7.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
528-571 PB L 82124	On the atmosphere in rooms and its relation to the atmosphere in the open. By Kurt Egloff. n. d. In German. Doctor's thesis presented to the faculty of natural science of Technical College, Zürich.	$6.00
572-648 PB L 82124	Problems of cosmic physics, volume 16: "The clouds." By R. Süring. 1941. In German.	9.00
649-739 PB L 82124	Tasks and formulas from aerodynamics and aeronautical mechanics. By Gerhard Siegel VDI. 1943. In German.	11.00
740-775 PB L 82124	The influence of the large city on nonstationary rain regions and a contribution to the formation of local thunderstorms during warm periods. By Wilhelm Belger. 1940. In German. Dissertation in the field of meteorology presented to the philosophical faculty of the University of Berlin.	5.00
776-992 PB L 82124	Annual of the electrical telecommunication system. vol. 40. n. d. In German.	23.00

PB L 74933. VIEWEG, FRIEDRICH, & SOHN, BRAUNSCHWEIG, GERMANY. Publications concerning electrical equipment, welding, mechanics and optics. (FIAT Microfilm Reel W-35, Frames 500-998) 1939-1944. 499 f. Price: Microfilm-$5.75 - Enlargement print-$50.00

This reel prepared by FIAT investigators in Germany contains only publications of the above-mentioned firm. 16 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
500-556 PB L 74933	Radio navigation in aviation. By Paul Handel and Kurt Krüger, 1944. In German.	$6.00
557-610 PB L 74933	The density of liquid and solid substances. By Helmut Harms, 1941. In German.	5.50
611-671 PB L 74933	Statistical mechanics on the basis of the quantum theory. By Pascual Jordan, 1944. In German.	6.50
672-714 PB L 74933	The Raman effect. By Frank Matossi, 1944. In German.	4.50
	Reports of the "Wöhler Institut", Braunschweig	
	Number 37 - 1940	
715-741 PB L 74933	The endurance strength of screw threads at various temperatures and the influence of surface pressure on them. By Werner Bertram. In German.	3.00
742-748 PB L 74933	Cold cast steel under complete pressure. By O. Föppl. In German.	1.50
749-752 PB L 74933	Suspension of an internal combustion engine in rubber for the attenuation of free mass forces. By O. Föppl. In German.	1.50
	Number 38 - 1941	
753-779 PB L 74933	The influence of prestressing on the damping power of wires. By Karl Lippacher. In German.	3.00
780-787 PB L 74933	The most efficient way to produce surface pressure. By O. Föppl. In German.	1.50
	Number 39 - 1943	
788-800 PB L 74933	Flowing and residual tensions in hollow cylinders cold stressed under high pressure from all sides. By O. Föppl. In German.	1.50
800-805 PB L 74933	The changes in length of cylindrical test bars due to surface pressure. By O. Föppl. In German.	1.50
806-809 PB L 74933	Compression of the surface layer into wave forms. By O. Föppl. In German.	1.50
810-813 PB L 74933	Sand blasting of steel bows with quartz sand, in order to increase their fatigue strength against alternating torsional stresses. By O. Föppl. In German.	1.50
814-817 PB L 74933	Rubber blocks, stressed by pressure, which are used for the elastic mounting of machines. By O. Föppl. In German.	1.50
818-868 PB L 74933	Measuring technique for greatly alternating stresses. By Karl Potthoff, 1941. In German.	5.50
869-998 PB L 74933	Practical manual of arc welding. By Dag Du Rietz and Helmut Koch, 1939. In German.	3.00

CHEMICALS AND ALLIED PRODUCTS

PB L 70273. REICHSPATENTAMT, BERLIN. German patents: Class 12,12m; Groups 1,8. (FIAT Microfilm Reel AA 88, Frames 3221-4237) 1880-1940. 1016 f. Price: Microfilm-$6.00 - Enlargement print-$102.00
This microfilm reel, prepared by FIAT in Germany from the files of the German Patent Office, contains 396 patents in Class 12,12 m, Groups 1 and 8, chrome compounds and hydrocarbons. Chemical processes and apparatus, compounds of oxides and hydroxides of calcium, barium and strontium are included. The patents are dated between 1880 and 1940. In German.

PB L 70273-S. REICHSPATENTAMT, BERLIN. German patents: Class 12,12m; Groups 1, 8. (FIAT Microfilm Reel AA 88, Frames 3221-4237, abstract cards) 1880-1940. 396 p. Price: Microfilm-$8.00 - Photostat-$27.00
These are abstract cards for the above FIAT microfilm reel AA 88, PB 70273, prepared by FIAT personnel in Germany. Each abstract card gives the German title with an English translation, patent number, classification, date, patentee and inventor.

PB L 70274. REICHSPATENTAMT, BERLIN. German patents: Class 12, Groups 1, 4. (FIAT Microfilm Reel AA 89, Frames 1-504) 1882-1941. 504 f. Price: Microfilm-$6.00 - Enlargement print-$50.50
This microfilm reel, prepared by FIAT in Germany from the files of the German Patent Office, contains 201 patents in Class 12, Groups 1, 4. Hydrocarbons; boiling or digesting for chemical purposes, and condensation or solidification of vapors for general chemical purposes are included. The patents are dated between 1882-1941. In German.

PB L 70274-S. REICHSPATENTAMT, BERLIN. German patents: Class 12, groups 1, 4. (FIAT Microfilm Reel AA 89, Frames 1-504, abstract cards) 201 p. Price: Microfilm-$5.00 - Photostat-$14.00
These are abstract cards for the above FIAT Microfilm Reel AA 89, PB 70274, prepared by FIAT personnel in Germany. Each abstract card gives the German title with an English translation, patent number, classification, date, patentee and inventor.

PB L 20528. I.G. FARBENINDUSTRIE A.G., HÖCHST, GERMANY. Patent applications of the Höchst office 1939-1940, 1942-1943. (FIAT Microfilm Reel Patents 150, Frames 3087-4085) 1939-1943. 998 f. Price: Microfilm-$6.00 Enlargement Print-$100.00
This FIAT microfilm reel contains 249 patent applications of I.G. Farben chiefly in the field of chemistry, dated 1939-1943. Individual items will be available as enlargement prints. Please include PB and frame number when ordering an individual item. They are all in German.

PB Numbers Frames	Title	Price
L 32267 Frames 3087-3090	Process for shaving round steel bodies, etc., by means of the oxy-acetylene flame. Ger. patent application I 73103 Ib/49h, dated Sep 5, 1942. In German.	$1.00
L 32268 Frames 3091-3096	Process for producing 2-alkoxy-1,3-butadienes. Ger. patent application I 73122 IVd/12o, dated Sep 9, 1942. In German.	1.00
L 32269 Frames 3097-3098	Plasticizers for synthetic materials. Ger. patent application I 73123 IVc/39b, dated Sep 9, 1942. In German.	1.00
L 32270 Frames 3099-3102	Process for obtaining phenols. Ger. patent application I 73142 IVc/12q, dated Sep 14, 1942. In German.	1.00
L 32271 Frames 3103-3106	Acetylene generator for gasification of calcium carbide powder. Ger. patent application I 73143 IVb/26b, dated Sep 14, 1942. In German.	1.00
L 32272 Frames 3107-3109	Process for producing vinyl esters. Ger. patent application I 73164 IVd/12o, dated Sep 14, 1942. In German.	1.00
L 32273 Frames 3110-3118	Fully enclosed centrifuge. Ger. patent application I 73167 III/82b, dated Sep 17, 1942. In German.	1.00
L 32274 Frames 3119-3121	Process for producing adipic acid or its homologues. Ger. patent application I 73175 IVd/12o, dated Sep 17, 1942. In German.	1.00
L 32275 Frames 3122-3124	Process for refining shaped bodies from water-insoluble polymers of unsaturated compounds with an olefinic double bond. Ger. patent application I 73188 IVd/8m, dated Sep 19, 1942. In German.	1.00
L 32276 Frames 3125-3130	Process for producing water-soluble urethanes. Ger. patent application I 73251 IVc/12o, dated Sep 26, 1942. In German.	1.00
L 32277 Frames 3131-3136	Process for producing condensation products. Ger. patent application I 73268 IVc/12q, dated Sep 26, 1942. In German.	1.00
L 32278 Frames 3137-3142	Process for producing condensation products. Ger. patent application I 73 252 IVc/12o, dated Sep 28, 1942. In German.	1.00
L 32279 Frames 3143-3145	Welding rod for gas or electric-arc welding. Ger. patent application I 73241 VIa/49h, dated Sep 28, 1942. In German.	1.00
L 32280 Frames 3146-3152	Process for regulating direct or alternating voltages, currents, or other physical magnitudes. Ger. patent application I 73269 VIIIb/21c, dated Sep 28, 1942. In German.	1.00
L 32281 Frames 3153-3154	Flux for welding light metals. Ger. patent application I 73253 VI/49h, dated Sep 29, 1942. In German.	1.00
L 32282 Frames 3155-3157	Process for producing coating materials and adhesives. Ger. patent application I 73276 IVc/22g, dated Oct 1, 1942. In German.	1.00
L 33014 Frames 3158-3159	Process for producing or improving leather. Ger. patent application I 73242 IVd/28a, Sep 30, 1942. In German.	1.00
L 32283 Frames 3160-3161	Process for producing or improving leather. Ger. patent application I 73289 IVd/28a, dated Oct 7, 1942. In German.	1.00
L 32284 Frame 3162	Synthetic perfumes. Ger. patent application I 73317 IVa/23a, dated Oct 12, 1942. In German.	1.00
L 32285 Frames 3163-3164	Process for producing alkali salts of monochloracetic acid. Ger. patent application I 73382 IVd/12o, dated Oct 20, 1942. In German.	1.00
L 32286 Frames 3165-3176	Viscosimeter for measuring and controlling purposes. Ger. patent application I 73405 IXb/42b, dated Oct 22, 1942. In German.	1.00
L 32287 Frames 3177-3178	Process for producing acetamide. Ger. patent application I 73417 IVd/12o, dated Oct 22, 1942. In German.	1.00

L 32288 Frames 3179-3185 **Process for producing resins.** Ger. patent application I 73434 IVc/39c, dated Oct 26, 1942. In German. 1.00

L 32289 Frame 3186 **Process for obtaining from lung tissue a substance which facilitates blood coagulation.** Ger. patent application I 73452 IVa/30h, dated Oct 26, 1942. In German. 1.00

L 32290 Frames 3187-3190 **Feeding device for multiple lead screws, etc.** Ger. patent application I 73447 XI/81e, dated Oct 27, 1942. In German. 1.00

L 32291 Frames 3191-3192 **Plasticizers.** Ger. patent application I 73435 IVc/39b, dated Oct 27, 1942. In German. 1.00

L 32292 Frames 3193-3194 **Process for improving fibrous materials from natural or regenerated cellulose.** Ger. patent application I 73527 IVd/8k, dated Oct 29, 1942. In German. 1.00

L 32293 Frames 3195-3197 **Process for producing condensation products.** Ger. patent application I 72379 IVc/12o, dated May 30, 1942. In German. 1.00

L 32294 Frames 3198-3199 **Agent for the control of animal pests.** Ger. patent application I 73472 IVa/45l, dated Nov 2, 1942. In German. 1.00

L 32295 Frames 3200-3202 **Process for producing nitrogen-containing condensation products.** Ger. patent application I 73511 IVc/12o, dated Nov 4, 1942. In German. 1.00

L 32296 Frames 3203-3204 **Process for producing shaving tools, or the like with cutting edges welded on in the liquid state.** Ger. patent application I 73512 Ib/49h, dated Nov 5, 1942. In German. 1.00

L 32297 Frames 3205-3208 **Process for producing carbon electrodes.** Ger. patent application I 73519 VIIIc/21h, dated Nov 6, 1942. In German. 1.00

L 32298 Frames 3209-3212 **Process for producing water-soluble urethanes.** Ger. patent application I 73528 IVc/12o, dated Nov 6, 1942. In German. 1.00

L 32299 Frames 3213-3215 **Process for halogenating hydrocarbons.** Ger. patent application I 73529 IVd/12o, dated Nov 6, 1942. In German. 1.00

L 32300 Frames 3216-3217 **Process for producing glycolide.** Ger. patent application I 73583 IVc/12gu, dated Nov 13, 1942. In German. 1.00

L 32301 Frames 3218-3220 **Pins for teats of cows.** Ger. patent application I 73602 IVa/53n, dated Nov 14, 1942. In German. 1.00

L 32302 Frame 3221 **Process for producing fast-drying binders for insulating coatings, and the like.** Ger. patent application I 73591 IVc/22h, dated Nov 14, 1942. In German. 1.00

L 32303 Frames 3222-3225 **Process for producing styrene.** Ger. patent application I 73592 IVd/12o, dated Nov 16, 1942. In German. 1.00

L 32304 Frames 3226-3229 **Process for producing ammonium thiocyanate.** Ger. patent application I 73632 IVb/12k, dated Nov 19, 1942. In German. 1.00

L 32305 Frames 3230-3231 **Process for obtaining simultaneously insulin and enzymes from pancreas.** Ger. patent application I 73634 IVa/30h, dated Nov 20, 1942. In German. 1.00

L 33015 Frames 3232-3233 **Process for obtaining simultaneously insulin and enzymes from pancreas.** Ger. patent application I 73635 IVa/30h, dated Nov 20, 1942. In German. 1.00

L 32306 Frames 3234-3238 **Process for producing sulfuryl amide.** Ger. patent application I 73633 IVb/12i, dated Nov 20, 1942. In German. 1.00

L 32307 Frames 3239-3240 **Process for controlling the flow of gases and liquids.** Ger. patent application I 73643 IXb/42e, dated Nov 21, 1942. In German. 1.00

L 32308 Frames 3241-3243 **Process for producing enzyme preparations.** Ger. patent application I 73636 IVa/6a, dated Nov 21, 1942. In German. 1.00

L 32309 Frames 3244-3248 **Process for extracting sulfuryl amide.** Ger. patent application I 73644 IVb/12i, dated Nov 23, 1942. In German. 1.00

L 32310 Frames 3249-3250 **Process for producing molecular compounds.** Ger. patent application I 73697 IVc/12p, dated Nov 28, 1942. In German. 1.00

L 32311 Frame 3251 **Greasing agents for textiles and leather.** Ger. patent application I 73698 IVd/28a, dated Nov 28, 1942. In German. 1.00

L 32312 Frames 3252-3257 **Process for paper sizing.** Ger. patent application I 73720 IVb/55c, dated Dec 1, 1942. In German. 1.00

L 32313 Frames 3258-3263 **Process for paper sizing.** Ger. patent application I 73719 IVb/55c, dated Dec 1, 1942. In German. 1.00

L 32314 Frames 3264-3269 **Process for controlling direct and alternating voltages.** Ger. patent application I 73721 VIIIb/21c, dated Dec 2, 1942. In German. 1.00

L 33016 Frame 3270 **Process for producing fast drying binders for insulating coatings.** Ger. patent application I 73765 IVc/22h, dated Dec 4, 1942. In German. 1.00

L 32315 Frames 3271-3275 **Process for producing sulfamidoalkylnitriles.** Ger. patent application I 73774 IVd/12o, dated Dec 4, 1942. In German. 1.00

L 32316 Frames 3276-3281 **Process for producing sulfonic acids.** Ger. patent application I 73773 IVd/12o, dated Dec 4, 1942. In German. 1.00

L 32317 Frames 3282-3286 **Anti-friction mounting.** Ger. patent application I 73799 XII/47b, dated Dec 10, 1942. In German. 1.00

L 32318 Frames 3287-3290 **Process for producing lignite-oil dispersions free from ashes or low in ash content.** Ger. patent application I 73880 VI/1c, dated Dec 16, 1942. In German. 1.00

L 32319 Frames 3291-3293 **Greasing agents for leather and textiles.** Ger. patent application I 73775 IVd/28a, dated Dec 4, 1942. In German. 1.00

L 32320 Frames 3294-3297 **Process for producing ketones of the sterol series.** Ger. patent application I 73779 IVc/12o, dated Dec 7, 1942. In German. 1.00

L 32321 Frames 3298-3301 **Process for producing 2-chloro-1,3-butadiene.** Ger. patent application I 73814 IVd/12o, dated Dec 9, 1942. In German. 1.00

L 32322 Frames 3302-3307 — Paper sizing process. Ger. patent application I 73816 IVb/55c, dated Dec 11, 1942. In German. 1.00

L 32323 Frames 3308-3310 — Protective colloids. Ger. patent application I 73813 IVd/12s, dated Dec 10, 1942. In German. 1.00

L 32324 Frames 3311-3312 — Addition agents for plant protecting substances. Ger. patent application I 73841 IVc/451, dated Dec 10, 1942. In German. 1.00

L 32325 Frames 3313-3314 — Process for producing alkali metals. Ger. patent application I 73815 IVb/121, dated Dec 12, 1942. In German. 1.00

L 32326 Frames 3315-3320 — Process for producing condensation products. Ger. patent application I 73866 IVc/12o, dated Dec 16, 1942. In German. 1.00

L 32327 Frames 3321-3326 — Process for producing water-soluble, oxygen-containing organic substances. Ger. patent application I 73881 IVd/12o, dated Dec 18, 1942. In German. 1.00

L 32328 Frames 3327-3333 — Process for producing resin-like condensation products. Ger. patent application I 73883 IVc/39c, dated Dec 18, 1942. In German. 1.00

L 32329 Frames 3334-3337 — Process for producing esters of carboxylic acid. Ger. patent application I 73882 IVd/12o, dated Dec 18, 1942. In German. 1.00

L 32330 Frames 3338-3342 — Plasticizers. Ger. patent application I 73910 IVc/39b, dated Dec 21, 1942. In German. 1.00

L 32331 Frames 3343-3346 — Process for purifying acetylene. Ger. patent application I 74025 IVb/26a, dated Dec 28, 1942. In German. 1.00

L 32332 Frames 3347-3351 — Process for producing condensation products. Ger. patent application I 73938 IVc/39c, dated Feb 28, 1942. In German. 1.00

L 32333 Frames 3352-3354 — Process for producing basic esters. Ger. patent application I 73997 IVd/12q, dated Dec 28, 1942. In German. 1.00

L 32334 Frames 3355-3362 — Process for producing oil-like and resin-like condensation products. Ger. patent application I 73940 IVd/39c, dated Dec 28, 1942. In German. 1.00

L 32335 Frames 3363-3365 — Process for producing piperidine compounds. Ger. patent application I 73939 IVc/12p, dated Dec 28, 1942. In German. 1.00

L 32336 Frames 3366-3370 — Process for producing polymerization resins. Ger. patent application I 73998 IVc/39c, dated Dec 31, 1942. In German. 1.00

L 32337 Frames 3371-3374 — Process for purifying 2-chloro-1,3-butadiene. Ger. patent application I 73742 IVd/12o, dated Dec 2, 1942. In German. 1.00

L 32338 Frames 3375-3379 — Oscillator. Ger. patent application I 74016 IXb/42a, dated Jan 4, 1943. In German. 1.00

L 32339 Frames 3380-3383 — Fire proofing agents. Ger. patent application I 73968 IVd/38h, dated Jan 4, 1943. In German. 1.00

L 32340 Frames 3384-3391 — Fire proofing agents. Ger. patent application I 73967 IVd/38k, dated Jan 4, 1943. In German. 1.00

L 32341 Frames 3392-3396 — Process for tempering small cemented wheels by means of an autogenous flame. Ger. patent application I 74050 VIa/18c, dated Jan 18, 1943. In German. 1.00

L 32342 Frames 3397-3398 — Process for finishing textile materials. Ger. patent application I 74056 IVd/8k, dated Jan 12, 1943. In German. 1.00

L 32343 Frames 3399-3403 — Process for producing sulfonic acids. Ger. patent application I 74068 IVd/12o, dated Jan 14, 1943. In German. 1.00

L 32344 Frames 3404-3407 — Process for producing carboxylic acid esters. Ger. patent application I 74083 IVd/12o, dated Jan 15, 1943. In German. 1.00

L 32345 Frames 3408-3410 — Anti-friction mounting. Ger. patent application I 74108 XII/47b, dated Jan 19, 1943. In German. 1.00

L 32346 Frames 3411-3414 — Process for increasing the wearing quality of wool and wool containing fiber mixtures. Ger. patent application I 74135 IVd/8k, dated Jan 21, 1943. In German. 1.00

L 32347 Frames 3415-3433 — Method of controlling the temperature of overheated steam in generators, boilers and the like. Ger. patent application I 74158 I/13d, dated Jan 26, 1943. In German. 2.00

L 32348 Frames 3434-3436 — Process for producing cyclohexane-1,2,3,5-tetracarboxylic acid. Ger. patent application I 74222 IVc/12o, dated Jan 28, 1943. In German. 1.00

L 32349 Frames 3437-3439 — Process for degassing of liquids and metal melts. (Degassing by vibration) Ger. patent application I 74223 IVb/12e, dated Feb 2, 1943. In German. 1.00

L 32350 Frames 3440-3441 — Hose made of plastics. Ger. patent applications I 17473 Gm/47i and I 74209 XII/47f, dated Feb 1, 1943. In German. 1.00

L 32351 Frame 3442 — Process for stiffening felt and straw hats, and technical felts. Ger. patent application I 74251 IVd/8k, dated Feb 3, 1943. In German. 1.00

L 32352 Frames 3443-3445 — Process for producing condensation products. Ger. patent application I 74266 IVc/12o, dated Feb 8, 1943. In German. 1.00

L 32353 Frames 3446-3448 — Polymerization process. Ger. patent application I 74267 IVc/39c, dated Feb 8, 1943. In German. 1.00

L 32354 Frames 3449-3456 — Mounted welding cutters with automatic lead of cutting torch for form cutting with slant edges. Ger. patent applications I 74276 Ib/49h, dated Feb 9, 1943 and I 17528 Gm/49h, dated Feb 25, 1943. In German. 1.00

L 32355 Frames 3457-3462 — Mounted welding cutters with magnetic roller lead and automatic lead of cutting torch for form cutting with slant edges. Ger. patent applications I 74302 Ib/49h and I 17505 Gm/49h, dated Feb 11, 1943. In German. 1.00

L 32356 Frames 3463-3466 — Plasticizers. Ger. patent application I 74286 IVc/39b, dated Feb 10, 1943. In German. 1.00

L 32357 Frames 3467-3468 — Process for producing phosphate coatings on metals. Ger. patent application I 74287 VIa/48d, dated Feb 11, 1943. In German. 1.00

L 32358 Frames 3469-3473 — Process for producing fast colors. Ger. patent application I 74309 IVd/8m, dated Feb 13, 1943. In German. 1.00

L 32359 Frames 3474-3478 — Process for producing chlorination products of aliphatic hydrocarbons of low molecular weight. Ger. patent application I 74348 IVd/12o, dated Feb 16, 1943. In German. 1.00

L 32360 Frames 3479-3480 — Grinding process. Ger. patent application I 74424 III/50e, dated Feb 25, 1943. In German. 1.00

L 32361 Frames 3481-3483 — Process for producing complex compounds. Ger. patent application I 74405 IVd/12o, dated Feb 19, 1943. In German. 1.00

L 32362 Frames 3484-3486 — Process for producing substituted N-phenylpyrrol-2-aldehydes. Ger. patent application I 74386 IVc/12p, dated Feb 22, 1943. In German. 1.00

L 32363 Frames 3487-3488 — Process for stabilizing halogenated long-chain aliphatic hydrocarbons. Ger. patent application I 74385 IVd/12o, dated Feb 20, 1943. In German. 1.00

L 32364 Frames 3489-3492 — Process for producing 1-hydroxynaphthalene-3-carboxylic acids. Ger. patent application I 74435 IVc/12q, dated Feb 26, 1943. In German. 1.00

L 32365 Frames 3493-3494 — Insecticides. Ger. patent application I 73473 IVa/45 1, dated Oct 31, 1942. In German. 1.00

L 32366 Frames 3495-3502 — Device for measuring or controlling specific gravities or reaction times of flowing media in closed vessels. Ger. patent application I 74430 IXb/421, dated Mar 1, 1943. In German. 1.00

L 32367 Frames 3503-3507 — Process for producing sulfonic acids. Ger. patent application I 74477 IVd/12o, dated Mar 3, 1943. In German. 1.00

L 32368 Frames 3508-3511 — Paper sizing process. Ger. patent application I 74478 IVb/55c, dated Mar 4, 1943. In German. 1.00

L 32369 Frames 3512-3513 — Process for producing phosphorescent earth alkali sulfides. Ger. patent application I 74522 IVb/22f, dated Mar 10, 1943. In German. 1.00

L 32370 Frames 3514-3526 — Method for measurement and control of concentrations in flowing media. Ger. patent application I 74523 IXb/42 1, dated Mar 11, 1943. In German. 1.00

L 32371 Frames 3527-3529 — Process for producing hydrocarbons containing fluorine and chlorine. Ger. patent application I 74550 IVd/12o, dated Mar 11, 1943. In German. 1.00

L 32372 Frames 3530-3536 — Welding cutters. Ger. patent applications I 74561 Ib/49h, dated Mar 13, 1943, and I 17575 Ga/49h, dated Mar 15, 1943. In German. 1.00

L 32373 Frames 3537-3539 — Process for producing polymerization products. Ger. patent application I 74575 IVc/39b, dated Mar 16, 1943. In German. 1.00

L 32374 Frames 3540-3542 — Process for solidifying and insulating of building and ground layers. Ger. patent application I 74620 IVb/24i, dated Mar 20, 1943. In German. 1.00

L 32375 Frames 3543-3545 — Process for producing sulfonic acids. Ger. patent application I 74599 IVd/12o, dated Mar 19, 1943. In German. 1.00

L 32376 Frames 3546-3548 — Process for producing synthetic resin masses which solidify in the cold. Ger. patent application I 74670 IVc/39c, dated Mar 26, 1943. In German. 1.00

L 32377 Frames 3549-3551 — Process for splitting off water from compounds containing hydroxyl groups. Ger. patent application I 74626 IVc/12o, dated Mar 19, 1943. In German. 1.00

L 32378 Frames 3552-3554 — Process for producing complex compounds. Ger. patent application I 74627 IVd/12o, dated Mar 20, 1943. In German. 1.00

L 32379 Frames 3555-3559 — Process for producing alkylsulfonyl-acyl-peroxides. Ger. patent application I 74659 IVd/12o, dated Mar 20, 1943. In German. 1.00

L 32380 Frames 3560-3563 — Process for producing sulfonic acids. Ger. patent application I 74645 IVd/12o, dated Mar 24, 1943. In German. 1.00

L 32381 Frames 3564-3569 — Oils for metal working. Ger. patent application I 74660 IVd/23e, dated Mar 25, 1943. In German. 1.00

L 32382 Frames 3570-3572 — Drop-forming appliance. Ger. patent applications I 74646 IXb/42 1 and I 17599 Gm/42 1, dated Mar 26, 1943. In German. 1.00

L 32383 Frames 3573-3574 — Synthetic perfumes. Ger. patent application I 74661 IVa/23a, dated Mar 26, 1943. In German. 1.00

L 32384 Frames 3575-3576 — Synthetic perfumes. Ger. patent application I 74662 IVa/23a, dated Mar 26, 1943. In German. 1.00

L 32385 Frames 3577-3578 — Viscosimeter for measuring and controlling purposes. Ger. patent application I 74663 IXb/42 1, dated Mar 27, 1943. In German. 1.00

L 32386 Frames 3579-3581 — Pentamethylenetetramine sulfone. Ger. patent application I 74682 IVc/12p, dated Mar 29, 1943. In German. 1.00

L 32387 Frames 3582-3583 — Process for producing coatings on iron, steel, or zinc objects. Ger. patent application I 74683 VIa/48d, dated Mar 30, 1943. In German. 1.00

L 32388 Frames 3584-3586 — Process for connecting suitably ground parts. Ger. patent application I 74709 IXa/42h, dated Apr 3, 1943. In German. 1.00

L 32389 Frames 3587-3590 — Process for producing sulfonation products. Ger. patent application I 74728 IVd/12o, dated Apr 2, 1943. In German. 1.00

L 32390 Frames 3591-3592 — Tubular pump. Ger. patent application I 74714 Ia/59e, dated Apr 3, 1943. In German. 1.00

L 32391 Frames 3593-3594 — Concrete de-sheathing agent for metal sheathing. Ger. patent application I 74768 VI/80b, dated Apr 2, 1943. In German. 1.00

L 33017 Frames 3595-3612 — Process for producing azo dyes. Ger. patent application I 74843 IVd/22a, dated Apr 17, 1943. In German. 1.00

L 32392 Frames 3613-3620 — Process for purifying impure magnesium oxide or hydroxide. Ger. patent application I 74788 IVb/12m, dated Apr 10, 1943. In German. 1.00

L 32393 Frames 3621-3623 — Process for producing aliphatic benzene sulfonates of high molecular weight. Ger. patent application I 74769 IVd/12o, dated Apr 6, 1943. In German. 1.00

L 32394 Frames 3624-3632 — Welding cutters with pattern lead. Ger. patent applications I 74778 Ib/49h and I 17638 Ga/49h, dated Apr 10, 1943. In German. 1.00

L 32395 Frames 3633-3642 — Process for distilling easily polymerizing and sensitive substances, preferably under reduced pressure. Ger. patent application I 74807 IVa/12a, dated Apr 14, 1943. In German. 1.00

L 32396 Frames 3643-3645 — Process for producing leather oils and greasing agents. Ger. patent application I 74806 IVd/12o, dated Apr 10, 1943. In German. 1.00

L 32397 Frames 3646-3648 — Hexamethylenetetraminesulfone. Ger. patent application I 74830 IVc/12p, dated Apr 13, 1943. In German. 1.00

L 32398 Frames 3649-3650 — Kneading pump. Ger. patent application I 74901 IVb/80e, dated Apr 14, 1943. In German. 1.00

L 32399 Frames 3651-3655 — Stirring and mixing vessel, particularly for easily adhering substances. Ger. patent application I 74845 IVb/12e, dated Apr 19, 1943. In German. 1.00

L 32400 Frames 3656-3660 — Process for separating sulfuric acid from sulfonic acids of high molecular weight. Ger. patent application I 74844 IVd/12o, dated Apr 17, 1943. In German. 1.00

L 32401 Frames 3661-3675 — Process for automatic equalization of bridge-circuits. Ger. patent application I 74877 VIIId/21e, dated Apr 24, 1943. In German. 1.50

L 32402 Frames 3676-3678 — Lubricating and insulating agents, particularly for appliances that come into contact with oxygen, etc. Ger. patent application I 74907 IVd/22c, dated Apr 29, 1943. In German. 1.00

L 32403 Frames 3679-3686 — Process for producing substances resistant to fuels. Ger. patent application I 65478 IVc/39b, dated Aug 22, 1939. In German. 1.00

L 32404 Frames 3687-3689 — Process for producing lignite coke low in ash content. Ger. patent application I 72215 VI/10a, dated May 13, 1942. In German. 1.00

L 32405 Frames 3690-3692 — Process for textile finishing. Ger. patent application I 73057 IVd/8k, dated Aug 28, 1942. In German. 1.00

L 32406 Frames 3693-3695 — Walls and separations with reduced heat transmission. Ger. patent application I 73693 V/37b, dated Nov 30, 1942. In German. 1.00

L 32407 Frames 3696-3697 — Process for producing sodium from sodium amalgam. Ger. patent application I 74928 VIa/40c, dated May 5, 1943. In German. 1.00

L 32408 Frames 3698-3700 — Leather oils and greasing agents. Ger. patent application I 74908 IVd/28a, dated May 3, 1943. In German. 1.00

L 32409 Frames 3701-3704 — Friction wheel kneading pump. Ger. patent application I 75040 VIb/80a, dated May 7, 1943. In German. 1.00

L 32410 Frames 3705-3706 — Process for sealing pores. Ger. patent application I 74934 IVd/8k, dated May 5, 1943. In German. 1.00

L 32411 Frames 3707-3708 — Process for sealing pores. Ger. patent application I 74935 IVd/8k, dated May 5, 1943. In German. 1.00

L 32412 Frames 3709-3711 — Process for sealing pores. Ger. patent application I 74956 IVd/8k, dated May 6, 1943. In German. 1.00

L 32413 Frames 3712-3714 — Process for sealing pores. Ger. patent application I 74957 IVd/8k, dated May 6, 1943. In German. 1.00

L 32414 Frames 3715-3717 — Process for sealing pores. Ger. patent application I 74958 IVd/8k, dated May 6, 1943. In German. 1.00

L 32415 Frames 3718-3720 — Process for sealing pores. Ger. patent application I 74959 IVd/8k, dated May 6, 1943. In German. 1.00

L 32416 Frames 3721-3726 — Substitutes for fat and wax. Ger. patent application I 74972 IVc/22g, dated May 7, 1943. In German. 1.00

L 32417 Frames 3727-3730 — Process for producing water-soluble, oxygen-containing organic substances by oxidising certain types of coal. Ger. patent application I 74995 IVd/12o, dated May 8, 1943. In German. 1.00

L 32418 Frames 3731-3733 — Foaming agents for technical purposes. Ger. patent application I 74996 IVd/12s, dated May 10, 1943. In German. 1.00

L 32419 Frames 3734-3739 — Process for accelerating polymerization and co-polymerization of ethylene derivatives. Ger. patent application I 74997 IVc/39c, dated May 12, 1943. In German. 1.00

L 32420 Frames 3740-3747 — Apparatus for quick freezing of food, etc. Ger. patent application I 75020 Ia/17c, dated May 13, 1943. In German. 1.00

L 32421 Frames 3748-3750 — Apparatus for quick freezing of food, etc. Ger. patent application I 75019 Ia/17c, dated May 13, 1943. In German. 1.00

L 32422 Frames 3751-3752 — Process for producing condensation products. Ger. patent application I 75055 IVc/12q, dated May 18, 1943. In German. 1.00

L 32423 Frames 3753-3757 — Process for producing solid water-soluble condensation products. Ger. patent application I 75056 IVc/12q, dated May 18, 1943. In German. 1.00

L 32424 Frames 3758-3765 — Horn grinder and mixer. Ger. patent application I 75099 III/50c, dated May 24, 1943. In German. 1.00

L 32425 Frames 3766-3769 — Condensation products. Ger. patent application I 75041 IVc/12p, dated May 17, 1943. In German. 1.00

L 32426 Frames 3770-3771 — Process for producing condensation products. Ger. patent application I 75097 IVc/12q, dated May 21, 1943. In German. 1.00

L 32427 Frames 3772-3775 — Process for producing valuable resins from "Croton oil" accruing as waste product from the production of crotonaldehyde. Ger. patent application I 75060 IVc/39c, dated May 19, 1943. In German. 1.00

L 32428 Frames 3776-3777 — Fire-proofing agents. Ger. patent application I 75059 IVd/38h, dated May 18, 1943. In German. 1.00

L 32429 Frames 3778-3779 — Baking lacquers. Ger. patent application I 75071 IVc/22h, dated May 20, 1943. In German. 1.00

L 32430 Frames 3780-3782 — Process for producing technical air foams. Ger. patent application I 75136 IVb/61b, dated May 24, 1943. In German. 1.00

L 32431 Frames 3783-3789 — Process for producing polycondensation products. Ger. patent application I 75098 IVc/39c, dated May 21, 1943. In German. 1.00

L 32432 Frames 3790-3792 — Process for producing lignite low-temperature carbonization coke which is low in ash content, particularly low in iron. Ger. patent application I 75121 VIb/10a, dated May 24, 1943. In German. 1.00

L 32433 Frames 3793-3798 — Process for producing synthetic resins. Ger. patent application I 75155 IVc/39c, dated May 26, 1943. In German. 1.00

L 32434 Frames 3799-3803 — Leather greasing agents. Ger. patent application I 75137 IVd/28a, dated May 26, 1943. In German. 1.00

L 32435 Frames 3804-3809 — Process for producing sulfonation products. Ger. patent application I 75138 IVd/12o, dated May 27, 1943. In German. 1.00

L 32436 Frames 3810-3812 — Process for producing adhesive latex from synthetic high polymers, suitable for adhesive purposes. Ger. patent application I 73739 IVd/22i, dated Dec 4, 1942. In German. 1.00

L 32437 Frames 3813-3817 — Condensation products. Ger. patent application I 75187 IVc/12p, dated Jun 1, 1943. In German. 1.00

L 32438 Frames 3818-3824 — Process for joining objects from high-percent ferro silicon. Ger. patent application I 75220 VIIIc/21h, dated Jun 2, 1943. In German. 1.00

L 32439 Frames 3825-3826 — Process for producing sulfur. Ger. patent application I 75235 IVb/12i, dated Jun 9, 1943. In German. 1.00

L 32440 Frames 3827-3831 — Kneading pump. Ger. patent application I 75244 Ia/59e, dated Jun 11, 1943. In German. 1.00

L 32441 Frames 3832-3835 — Process for flame cutting of metallic objects. Ger. patent application I 75270 Ib/49h, dated Jun 12, 1943. In German. 1.00

L 32442 Frames 3836-3837 — Plasticizers. Ger. patent application I 75271 IVc/39b, dated Jun 12, 1943. In German. 1.00

L 32443 Frames 3838-3841 — Process for producing acetaldehyde. Ger. patent application I 75300 IVd/12o, dated Jun 18, 1943. In German. 1.00

L 32444 Frames 3842-3845 — Process for preserving the active constituents of the pancreas of slaughtered animals. Ger. patent application I 75315 IVa/30h, dated Jun 21, 1943. In German. 1.00

L 32445 Frames 3846-3847 — Process for producing diaminodicyclohexylmethanes or their derivatives. Ger. patent application I 74533 IVc/12o, dated Mar 10, 1943. In German. 1.00

L 32446 Frames 3848-3849 — Process for producing diaminodicyclohexylmethanes or their derivatives. Ger. patent application I 74532 IVc/12o, dated Mar 10, 1943. In German. 1.00

L 32447 Frames 3850-3853 — Appliance for straightening oblong objects. Ger. patent application I 74933 XII/81a, dated Apr 29, 1943. In German. 1.00

L 32448 Frames 3854-3856 — Process for producing greasing agents for leather or leather-like products. Ger. patent application I 73616 IVd/12o, dated Nov 18, 1942. In German. 1.00

L 32449 Frames 3857-3858 — Gun barrels with riflings. Ger. patent application I 61238 XI/72c, dated Apr 18, 1940. In German. 1.00

L 32450 Frames 3859-3861 — Fireproofing agent. Ger. patent application I 75393 IVd/38h, dated Jul 1, 1943. In German. 1.00

L 32451 Frames 3862-3867 — Accelerator for cement-setting. Ger. patent application I 75389 VIb/80b, dated Jul 1, 1943. In German. 1.00

L 32452 Frames 3868-3870 — Process for treating fibrous materials from natural or regenerated cellulose. Ger. patent application I 75421 IVd/8k, dated Jul 5, 1943. In German. 1.00

L 32453 Frames 3871-3873 — Diaphragm valves. Ger. patent application I 75419 XII/47g, dated Jul 2, 1943. In German. 1.00

L 32454 Frames 3874-3878 — Process for producing magnesia cements. Ger. patent application I 75394 VIb/80b, dated Jul 5, 1943. In German. 1.00

L 32455 Frames 3879-3887 — Safety valve. Ger. patent application I 75422 XII/47g, dated Jul 5, 1943. In German. 1.00

L 32456 Frames 3888-3890 — Process for producing reaction products of compounds of high molecular weight. Ger. patent application I 75430 IVc/39c, dated Jul 5, 1943. In German. 1.00

L 32457 Frames 3891-3894 — Process for producing polymerization products. Ger. patent application I 75431 IVc/39c, dated Jul 5, 1943. In German. 1.00

L 32458 Frames 3895-3900 — Under-water cutting torch. Ger. patent application I 75432 VIb/4g, dated Jul 7, 1943. In German. 1.00

L 32459 Frames 3901-3902 — Process for refining curled cellulose or cellulose hydrate textiles. Ger. patent application I 75420 IVd/8k, dated Jul 5, 1943. In German. 1.00

L 32460 Frames 3903-3904 — Process for producing trimesic acid. Ger. patent application I 75475 IVd/12o, dated Jul 10, 1943. In German. 1.00

L 32461 Frames 3905-3910 — Process for producing pyromellitic acid. Ger. patent application I 75476 IVd/12o, dated Jul 10, 1943. In German. 1.00

L 32462 Frames 3911-3914 — Process for producing basic indoles. Ger. patent application I 75477 IVc/12p, dated Jul 12, 1943. In German. 1.00

L 32463 Frame 3915 — Process for producing disc milling tools. Ger. patent application I 75490 Ib/49b, dated Jul 14, 1943. In German. 1.00

L 32464 Frames 3916-3920 — Production of colors and prints on textiles by means of pigments. Ger. patent application I 75533 IVd/8n, dated Jul 20, 1943. In German. 1.00

L 32465 Frames 3921-3923 — Process for determining and precipitating polyglycol ethers. Ger. patent application I 75531 IVd/12e, dated Jul 17, 1943. In German. 1.00

L 32466 Frames 3924-3926 — Process for concentrating sulfur from minerals by flotation. Ger. patent application I 75604 VIb/1c, dated Jul 27, 1943. In German. 1.00

L 32467 Frames 3927-3929 — Process for chlorinating methane and methyl chloride. Ger. patent application I 75617 IVd/12o, dated Jul 29, 1943. In German. 1.00

L 32468 Frames 3930-3932 — Process for producing basic aluminum salts. Ger. patent application I 75630 IVb/12m, dated Jul 31, 1943. In German. 1.00

L 32469 Frames 3933-3934 — Process for mending and strengthening bags from textile fibers. Ger. patent application I 75707 VII/3d, dated Aug 5, 1943. In German. 1.00

L 32470 Frames 3935-3936 — Process for vaulted brick lining of furnaces. Ger. patent application I 75196 V/24k7, dated Aug 12, 1943. In German. 1.00

L 32471 Frames 3937-3938 — Process for producing condensation products. Ger. patent application I 75682 IVc/12o, dated Aug 10, 1943. In German. 1.00

L 32472 Frames 3939-3945 — Packings for reaction vessels. Ger. patent application I 75714 IVb/12e, dated Aug 19, 1943. In German. 1.00

L 32473 Frames 3946-3949 — Process for printing with vat dyes on textiles. Ger. patent application I 75715 IVd/8n, dated Aug 19, 1943. In German. 1.00

L 32474 Frames 3950-3951 — Process for a subsequent treatment. Ger. patent application I 75716 IVd/8n, dated Aug 19, 1943. In German. 1.00

L 32475 Frames 3952-3953 — Process for producing single fibers capable of being spun on cotton spinning machines. Ger. patent application I 75759 IVc/29b, dated Aug 28, 1943. In German. 1.00

L 32476 Frame 3954 — Treatment for bleaching base fibers. Ger. patent application I 75771 IVd/8i, dated Aug 28, 1943. In German. 1.00

L 33018 Frames 3955-3956 — Chemical treatment of the preliminary yarn from raw green bast. Ger. patent application I 75758 IVc/29b, dated Aug 28, 1943. In German. 1.00

L 32477 Frames 3957-3959 — Process for treating fiber materials. Ger. patent application I 75809 IVd/8i, dated Aug 28, 1943. In German. 1.00

L 32478 Frames 3960-3964 — Treatment for bleaching bast fibers. Ger. patent application I 75806 IVd/8i, dated Aug 27, 1943. In German. 1.00

L 32479 Frames 3965-3968 — Treatment for protecting wood in underwater structures. Ger. patent application I 75778 IVd/38h, dated Aug 30, 1943. In German. 1.00

L 32480 Frames 3969-3970 — Treatment for increasing the abrasive resistance of drillings of compound steel milling tools. Ger. patent application I 75743 VIa/18i, dated Aug 26, 1943. In German. 1.00

L 32481 Frames 3971-3974 — Treatment for removing viscous adhering layers. Ger. patent application I 75810 IVc/75c, dated Aug 31, 1943. In German. 1.00

L 32482 Frames 3975-3979 — Process for producing nitrogen-containing polymerization products. Ger. patent application I 65787 IVc/39b, dated Oct 13, 1939. In German. 1.00

L 32483 Frames 3980-3984 — Appliance for straightening oblong objects. Ger. patent application I 75050 XII/81a, dated May 20, 1943. In German. 1.00

L 32484 Frames 3985-3989 — Dispersions. Ger. patent application I 75156 IVc/22h, dated May 27, 1943. In German. 1.00

L 32485 Frames 3990-3992 — Process for producing lignite low-temperature carbonization coke low in ash content. Ger. patent application I 75289 VIb/10b, dated Jun 19, 1943. In German. 1.00

L 32486 Frames 3993-3994 — Process for producing lignite low-temperature carbonization coke low in ash content. Ger. patent application I 75316 VIb/10b, dated Jun 22, 1943. In German. 1.00

L 32487 Frames 3995-4004 — Process for cleaning electrode coals with drillings. Ger. patent application I 75861 VIIIc/21f, dated Sep 7, 1943. In German. 1.50

L 32488 Frames 4005-4006 — Process for bleaching bast fibers. Ger. patent application I 75839 IVd/8i, dated Sep 8, 1943. In German. 1.00

L 32489 Frames 4007-4008 — Process for decomposing raw green bast fibers. Ger. patent application I 75834 IVc/39b, dated Sep 8, 1943. In German. 1.00

L 32490 Frames 4009-4010 — Process for producing loose fibers capable of being spun on cotton spinning machines. Ger. patent application I 75852 IVc/39b, dated Sep 9, 1943. In German. 1.00

L 32491 Frames 4011-4014 — Process for dyeing fibers and articles from further chlorinated polyvinyl chloride. Ger. patent application I 75853 IVd/8m, dated Sep 11, 1943. In German. 1.00

L 32492 Frames 4015-4018 — Process for producing condensation products. Ger. patent application I 75876 IVc/39c, dated Sep 16, 1943. In German. 1.00

L 32493 Frames 4019-4020 — Desheathing agent for set concrete. Ger. patent application I 75890 VIb/80b, dated Sep 18, 1943. In German. 1.00

L 32494 Frame 4021 — Additives to flat-printing dyes. Ger. patent application I 75936 IVa/15 1, dated Sep 20, 1943. In German. 1.00

L 32495 Frames 4022-4028 — Process for producing synthetic resins. Ger. patent application I 75921 IVc/39c, dated Sep 23, 1943. In German. 1.00

L 32496 Frames 4029-4031 — Process for producing water-soluble organic substances containing oxygen. Ger. patent application I 75928 IVd/12o, dated Sep 23, 1943. In German. 1.00

L 32497 Frames 4032-4035 — Process for producing water-soluble organic substances containing oxygen. Ger. patent application I 75929 IVd/12o, dated Sep 23, 1943. In German. 1.00

L 32498 Frames 4036-4039 — Oils for metal working. Ger. patent application I 75561 IVd/23c, dated Jul 21, 1943. In German. 1.00

L 32499 Frames 4040-4044 — Granulating machine. Ger. patent application I 75986 IXa/30g, dated Oct 6, 1943. In German. 1.00

L 32500 Frames 4045-4047 — Jacket for light-metal welding rods and electrodes. Ger. patent application I 76015 VIa/49h, dated Oct 6, 1943. In German. 1.00

L 32501 Frames 4048-4054 — Process for producing reaction products. Ger. patent application I 76016 IVc/39b, dated Oct 9, 1943. In German. 1.00

L 32502 Frames 4055-4057 — Stirring and mixing vessel for readily adhering substances. Ger. patent application I 76074 IVb/12e, dated Oct 19, 1943. In German. 1.00

L 32503 Frames 4058-4060 — Printing process. Ger. patent application I 76106 IVa/15k, dated Oct 25, 1943. In German. 1.00

L 32504 Frames 4061-4068 — Appliance for cutting thin-walled, wide-necked ampoules to the length required for sealing. Ger. patent application I 76134 VIb/32a, dated Oct 30, 1943. In German. 1.00

L 32505 Frames 4069-4071 — Process for producing pyromellitic acid. Ger. patent application I 76122 IVd/12o, dated Oct 27, 1943. In German. 1.00

L 32506 Frames 4072-4074 — Oils for metal working. Ger. patent application I 75532 IVd/23c, dated Jul 17, 1943. In German. 1.00

L 32507 Frames 4075-4077 — Process for producing air foam. Ger. patent application I 76201 IVb/61b, dated Nov 3, 1943. In German. 1.00

L 32508 Frames 4078-4082 — Basic materials for lacquers. Ger. patent application I 76188 IVc/22h, dated Nov 2, 1943. In German. 1.00

L 32509 Frames 4083-4085 — Fire-resistant coatings. Ger. patent application I 76189 IVc/22g, dated Nov 4. 1943. In German. 1.00

L 33019 — Patent applications of the Höchst office 1939-1940, 1942-1943. Index to FIAT Microfilm reel Patents 150. 2.00

PB L 20547. I.G. FARBENINDUSTRIE A.G., LEVERKUSEN, GERMANY. Patent applications of the Leverkusen office, 1936-1940. (FIAT Microfilm Reel Patents 155, Frames 1-1124, 16 mm microfilm) 1936-1940. 1054 f.
Price: Microfilm-$6.00 - Enlargement Print-$105.50
This reel is the first of five reels of patent applications of I.G. Farbenindustrie's Leverkusen works dating from 1939 to 1945. The other reels in this series are Patents 156, PB L 20546; Patents 157, PB L 20545; Patents 158, PB L 20544, and Patents 159, PB L 20543. The first 155 frames of this reel, Patents 155, consist of an index compiled by I.G.'s patent office at Hoechst giving the internal I.G. reference number, the patent application number assigned by the German Patent Office, date and title in German of all the patents on all the five reels. An index included in this reel, in German with an English translation, is available separately as PB L 86683, microfilm $1.50, photostat $3.00, 28 pages. 197 individual items on this reel, Patents 155, are listed below. Individual items will be available as enlargement prints only, the entire reel may be purchased as a microfilm for $6.00. Please include the frame numbers of each individual item ordered. In German.

Frames	Title	Price
156-163 PB L 20547	Stabilizing agent for synthetic rubberlike substances. Ger. patent application I 65605 IVc/39b, dated Sep 12, 1939. In German.	$1.50
164-165 PB L 20547	Process for preparation of 4-alkyl-5-oxyalkylthiazole compounds. Ger. patent application I 65609 IVc/12p, dated Sep 12, 1939. In German.	1.50
166-168 PB L 20547	Process for preparation of 2,3-Ketobutanol. Ger. patent application I 65620 IVd/12o, dated Sep 3, 1939. In German.	1.50
169-170 PB L 20547	Process for preparation of vinyl methyl ketone. Ger. patent application I 65621 IVd/12o, dated Sep 13, 1939. In German.	1.50
171-173 PB L 20547	Lacquer for electric bulbs for air raid protection purposes. Ger. patent application I 65635 IVa/22h, dated Sep 15, 1939. In German.	1.50
174-182 PB L 20547	Agent for increasing adhesion of rubber and rubber mixtures. Ger. patent application I 65639 IVc/39b, dated Sep 18, 1939. In German.	1.50
183-185 PB L 20547	Process for preparing iron-sulfur alloys. Ger. patent application I 65666 VI/18d, dated Sep 22, 1939. In German.	1.50
186-190 PB L 20547	Process for preparation of nitriles. Ger. patent application I 60991 IVd/12o, dated Apr 2, 1938. In German.	1.50
191-195 PB L 20547	Process for scission of alkyl groups from pyridine homologues. Ger. patent application I 63043 IVe/12p, dated Nov 30, 1938. In German.	1.50
196-200 PB L 20547	Process for preparation of halogen-substitution products of the dibenzanthrone or isodibenzanthrone series. Ger. patent application I 64329 IVd/22b, dated Apr 8, 1939. In German.	1.50
201-203 PB L 20547	Process for preparation of acrylonitrile. Ger. patent application I 65109 IVc/12o, dated Jul 10, 1939. In German.	1.50
204-207 PB L 20547	Process for electrolytic production of hard chromium coatings. Ger. patent application I 65749 VI/48a, dated Oct 6, 1939. In German.	1.50
208-212 PB L 20547	Process for preparing new diazoamido compounds. Ger. patent application I 65776 IVc/12qu, dated Oct 10, 1939. In German.	1.50
213-215 PB L 20547	Process for preparing dyes of the phthalocyanine series. Ger. patent application I 65800 IVd/22a, dated Oct 14, 1939. In German.	1.50
216-217 PB L 20547	Process for preparation of cyanobutadiene. Ger. patent application I 65800 IVd/22a, dated Oct 14, 1939. In German.	1.50
218-226 PB L 20547	Process for production of manganese. Ger. patent application I 65820 VI/40c, dated Oct 20, 1939. In German.	1.50
227-232 PB L 20547	Catalyst masses and process of preparation. Ger. patent application I 65829 IVb/12i, dated Oct 20, 1939. In German.	1.50
233-235 PB L 20547	Bristles. Ger. patent application I 65864 III/9a, dated Oct 27, 1939. In German.	1.50
236-243 PB L 20547	Process for treating textile fibers. Ger. patent application I 65865 IVd/8k, dated Oct 30, 1939. In German.	1.5[illegible]
244-245 PB L 20547	Filling for irrigated exchange apparatus. Ger. patent application I 65880 Ia/17a, dated Oct 10, 1939. In German.	1.50
246-248 PB L 20547	Anti-pest agents. Ger. patent application I 60921 IVa/45 1, dated Mar 28, 1938. In German.	1.50
249-252 PB L 20547	Process for preparing pyrimidine compounds. Ger. patent application I 60922 IVc/12p, dated Mar 28, 1938. In German.	1.50
253-254 PB L 20547	Process for preparation of hexaesters of tetra phosphoric acid. Ger. patent application I 62090 IVc/12o, dated Mar 3, 1938. In German.	1.50

255-256 PB L 20547 — Stabilization of halogencontaining substances. Ger. patent application I 62633 IVc/12o, dated Oct 11, 1938. In German. 1.50

257-258 PB L 20547 — Process for preparing beta-cyanobutadiene. Ger. patent application I 62748 IVc/12o, dated Oct 27, 1938. In German. 1.50

259-262 PB L 20547 — Process for preparation of ethylene imides of organic sulfonic acids. Ger. patent application I 63758 IVc/12p, dated Feb 7, 1939. In German. 1.50

263-268 PB L 20547 — Process for preparing pyrimidine compounds. Ger. patent application I 64435 IVc/12p, dated Apr 28, 1939. In German. 1.50

269-271 PB L 20547 — Rodenticides. Ger. patent application I 64436 IVa/45 1, dated Apr 28, 1939. In German. 1.50

272-280 PB L 20547 — Process for manufacturing manganese. Ger. patent application I 64844 VI/40o, dated Jun 15, 1939. In German. 1.50

281-286 PB L 20547 — Process for preparing acrylonitrile. Ger. patent application I 65109 IVc/12o, dated Jul 10, 1939. In German. 1.50

287-295 PB L 20547 — Process for manufacturing diphenylsulfone derivatives. Ger. patent application I 65569 IVd/12o, dated Sep 4, 1939. In German. 1.50

296-298 PB L 20547 — Process for chromium plating. Ger. patent application I 65900 VI/48a, dated Nov 3, 1939. In German. 1.50

299-302 PB L 20547 — Process for manufacturing monoesters of quinite. Ger. patent application I 65604 IVc/12o, dated Nov 2, 1939. In German. 1.50

303-305 PB L 20547 — Process for manufacturing p-acyloxycyclohexanones. Ger. patent application I 65905 IVc/12o, dated Nov 2, 1939. In German. 1.50

306-309 PB L 20547 — Process for spinning ammoniacal cupric oxide solutions of cellulose. Ger. patent application I 65906 IVc/29b, dated Nov 3, 1939. In German. 1.50

L 310-315 PB L 20547 — Process for manufacturing phthalocyanins. Ger. patent application I 65912 IVd/22a, dated Nov 4, 1939. In German. 1.50

316-319 PB L 20547 — Process for preparing sulfonamide compounds of the heterocyclic series. Ger. patent application I 65913 IVc/12p, dated Nov 6, 1939. In German. 1.50

320-331 PB L 20547 — Process for obtaining volatile substances from their solutions. Ger. patent application I 65918 IVb/12e, dated Nov 7, 1939. In German. 1.50

332-338 PB L 20547 — Process for obtaining zinc from zinc amalgam by electrolysis. Ger. patent application I 65922 VI/40c, dated Nov 8, 1939. In German. 1.50

339-345 PB L 20547 — New phthalocyanines and process of manufacture. Ger. patent application I 65934 IVd/22e, dated Nov 9, 1939. In German. 1.50

346-354 PB L 20547 — Process for heat-sensitizing genuine and synthetic latices. Ger. patent application I 65935 IVc/39b, dated Nov 10, 1939. In German. 1.50

355-360 PB L 20547 — Device for treating solid, granular substances with liquids. Ger. patent application I 65936 IVd/12e, dated Nov 8, 1939. In German. 1.50

361-365 PB L 20547 — Process for obtaining zinc via zinc amalgam. Ger. patent application I 65937 VI/40c, dated Nov 10, 1939. In German. 1.50

366-372 PB L 20547 — Process for recovering zinc and sulfur from sulfur-containing substances. Ger. patent application I 65945 VI/40c, dated Nov 11, 1939. In German. 1.50

373-378 PB L 20547 — Process for precipitating cellulose derivatives from their solutions. Ger. patent application I 65954 IVc/12o, dated Nov 14, 1939. In German. 1.50

379-385 PB L 20547 — Process for fixing soluble organic substances to any material in insoluble form. Ger. patent application I 65961 IV3/8n, dated Nov 15, 1939. In German. 1.50

386-387 PB L 20547 — Process for manufacture of succinimide. Ger. patent application I 65985 IVc/12p, dated Nov 16, 1939. In German. 1.50

388-389 PB L 20547 — Process for manufacture of phenoxyalkylcarboxylic acid compounds. Ger. patent application I 65986 IVc/12qu, dated Nov 18, 1939. In German. 1.50

390-391 PB L 20547 — Process for manufacture of stable preparations of o-acyloxybenzene carboxylic acids. Ger. patent application I 65987 IVa/30h, dated Nov 18, 1939. In German. 1.50

392-396 PB L 20547 — Process for manufacture of phthalocyanine. Ger. patent application I 66004 IVd/22e, dated Nov 22, 1939. In German. 1.50

397-400 PB L 20547 — Process for manufacture of anthanthrene sulfonic acids. Ger. patent application I 66024 IVc/12qu, dated Nov 23, 1939. In German. 1.50

401-405 PB L 20547 — Process for preparing sulfonamide compounds. Ger. patent application I 66025 IVc/12qu, dated Nov 24, 1939. In German. 1.50

406-409 PB L 20547 — Process for manufacture of phthalocyanine dyes. Ger. patent application I 66026 IVd/22e, dated Nov 25, 1939. In German. 1.50

410-414 PB L 20547 — Process for chrome plating. Ger. patent application I 66027 VI/48a, dated Nov 25, 1939. In German. 1.50

415-416 PB L 20547 — Process for dyeing textile materials. Ger. patent application I 66028 IVd/ga, dated Nov 25, 1939. In German. 1.50

417-419 PB L 20547 — Process for continuous production of spinning solutions from crude solutions of cellulose derivatives. Ger. patent application I 66029 IVc/29b, dated Nov 27, 1939. In German. 1.50

420-423 PB L 20547 — Protective coatings. Ger. patent application I 64183 IVc/39b, dated Mar 22, 1939. In German. 1.50

424-425 PB L 20547 — Process for producing phosphonium compounds. Ger. patent application

I 64345 IVc/12o, dated Apr 6, 1939. In German. 1.50

426-428 PB L 20547 — Process for producing phosphonium compounds. Ger. patent application I 64346 IVc/12o, dated Apr 6, 1939. In German. 1.50

429-430 PB L 20547 — Process for improving manufactured articles. Ger. patent application I 65320 IVa/45 1, dated Apr 8, 1939. In German. 1.50

431-438 PB L 20547 — Process for continuous esterifying and etherifying of cellulose. Ger. patent application I 65707 IVc/12o, dated Sep 9, 1939. In German. 1.50

439-444a PB L 20547 — Process for producing cellulose esters in fibre form. Ger. patent application I 65828 IVc/12o, dated Oct 20, 1939. In German. 1.50

445-448 PB L 20547 — Process for producing alkylated carboxylic acid anhydrides. Ger. patent application I 66069 IVd/12o, dated Dec 1, 1939. In German. 1.50

449-451 PB L 20547 — Process for dyeing enamels and glazes with cadmium pigments. Ger. patent application I 65081 VI/48c, dated Dec 12, 1939. In German. 1.50

452-456 PB L 20547 — Process for preparing chlorination products of synthetic rubberlike polymerizates. Ger. patent application I 66095 IVc/39b, dated Dec 1, 1939. In German. 1.50

457-463 PB L 20547 — Process for producing chromane compounds. Ger. patent application I 66097 IVc/12qu, dated Dec 2, 1939. In German. 1.50

464-465 PB L 20547 — Process for coloring enamels. Ger. patent application I 66098 VI/48c, dated Dec 12, 1939. In German. 1.50

466-469 PB L 20547 — Anticyclization agent for synthetic rubberlike polymers. Ger. patent application I 66137 IVc/39b, dated Dec 12, 1939. In German. 1.50

470-475 PB L 20547 — Process for heat-sensitizing natural and synthetic latices. Ger. patent application I 66151 IVc/39b, dated Dec 16, 1939. In German. 1.50

476-478 PB L 20547 — Process for improving active carbon. Ger. patent application I 66163 IVb/121, dated Dec 16, 1939. In German. 1.50

479-480 PB L 20547 — Process for base enamelling. Ger. patent application I 66175 VI/48c, dated Dec 12, 1939. In German. 1.50

481-487 PB L 20547 — Vat dyes and process of production. Ger. patent application I 66202 IVd/22b, dated Dec 27, 1939. In German. 1.50

488-489 PB L 20547 — Process for producing titanium-containing enamels. Ger. patent application I 66203 VI/48c, dated Dec 27, 1939. In German. 1.50

490-494 PB L 20547 — Green triazo dyes and process of production. Ger. patent application I 66215 IVd/22a, dated Dec 30, 1939. In German. 1.50

495-500 PB L 20547 — Protective agents against "lost" and similarly acting compounds. Ger. patent application I 55846 IVd/61c, dated Aug 29, 1936. In German. 1.50

501-503 PB L 20547 — Protective agents against "Lost" and similarly acting compounds. Ger. patent application I 57625 IVb/61b, dated Apr 7, 1937. In German. 1.50

504-507 PB L 20547 — Production of catalytic substances. Ger. patent application I 65381 IVb/12g, dated Aug 5, 1939. In German. 1.50

508-511 PB L 20547 — Process for promoting the disintegration of combustion products containing dicalcium silicate. Ger. patent application I 66245 VI/80h, dated Jan 5, 1940. In German. 1.50

512-515 PB L 20547 — Process for production of phthalocyanine dyes. Ger. patent application I 66259 IVa/22e, dated Jan 9, 1940. In German. 1.50

516-519 PB L 20547 — Process for pasting phthalocyanine dyes. Ger. patent application I 66271 IVa/8m, dated Jan 9, 1940. In German. 1.50

520-523 PB L 20547 — Process for improving adhesion between textiles and vulcanized rubber. Ger. patent application I 66345 IVc/39b, dated Jan 19, 1940. In German. 1.50

524-528 PB L 20547 — Process for intimate mixing of liquids. Ger. patent application I 66316 IVb/12e, dated Jan 20, 1940. In German. 1.50

529-530 PB L 20547 — Process for producing alkylated carboxylic acid esters. Ger. patent application I 66316 IVb/12o, dated Jan 20, 1940. In German. 1.50

531-534 PB L 20547 — Process for producing artificial resins. Ger. patent application I 66318 IVc/39b, dated Jan 20, 1940. In German. 1.50

535-539 PB L 20547 — Process for producing synthetic materials. Ger. patent application I 66329 IVd/12o, dated Jan 20, 1940. In German. 1.50

540-541 PB L 20547 — Catalyst earths. Ger. patent application I 66350 IVb/12g, dated Jan 23, 1940. In German. 1.50

542-544 PB L 20547 — Process for producing bleaching earth. Ger. patent application I 66351 IVb/121, dated Jan 23, 1940. In German. 1.50

545-548 PB L 20547 — Process for producing sulfuric acid esters from anthraquinone-anthrahydroquinone azines. Ger. patent application I 66357 IVa/22b, dated Jan 20, 1940. In German. 1.50

549-550 PB L 20547 — Acceleration of wound healing in plants. Ger. patent application I 66379 IVa/45 1, dated Jan 24, 1940. In German. 1.50

551-553 PB L 20547 — Process for scission of acrylonitrile. Ger. patent application I 66380 IVc/12o, dated Jan 29, 1940. In German. 1.50

554-557 PB L 20547 — 1-acylaminoaryl-5-pyrazolone and process for production. Ger. patent application I 66381 IVc/12o, dated Jan 29, 1940. In German. 1.50

558-560 PB L 20547 — Producing effects in dyed textiles. Ger. patent application I 66386 IVd/8m, dated Jan 29, 1940. In German. 1.50

561-564 PB L 20547 — Process for matting textiles. Ger. patent application I 66391 IVd/8k, dated Jan 31, 1940. In German. 1.50

565-568 PB L 20547 — Process for heat-sensitising plastic emulsions. Ger. patent application I 66398 IVc/39b, dated Jan 31, 1940. In German. 1.50

569-572 PB L 20547 — Dielectrics and plasticisers. Ger. patent application I 65440 VIIIb/21c, dated Aug 12, 1939. In German. 1.50

573-576 PB L 20547 — Alkylation process. Ger. patent application I 65435 IVd/12e, dated Aug 12, 1939. In German. 1.50

577-580 PB L 20547 — Process for production of complex fluorides. Ger. patent application I 65799 IVb/121, dated Oct 13, 1939. In German. 1.50

581-584 PB L 20547 — Process for producing esters. Ger. patent application I 66420 IVd/12o, dated Feb 5, 1940. In German. 1.50

585-587 PB L 20547 — Process for producing stable dry preparations of invertase. Ger. patent application I 66446 IVc/12p, dated Feb 3, 1940. In German. 1.50

588-590 PB L 20547 — Production of antimony powder. Ger. patent application I 66447 IVb/121, dated Feb 8, 1940. In German. 1.50

591-594 PB L 20547 — Process for treating industrial materials. Ger. patent application I 66454 IVd/8k, dated Feb 9, 1940. In German. 1.50

595-598 PB L 20547 — Corrugated plywood. Ger. patent application I 66465 XII/38c, dated Feb 12, 1940. In German. 1.50

599-606 PB L 20547 — Process for producing oxyaryl sulfones. Ger. patent application I 66474 IVc/12qu, dated Feb 12, 1940. In German. 1.50

607-609 PB L 20547 — Process for producing 4-aminobutane-1-ol. Ger. patent application I 66509 IVc/12qu, dated Feb 17, 1940. In German. 1.50

610-611 PB L 20547 — Process for producing powdered alkali hydroxyde. Ger. patent application I 66510 IVb/12 1, dated Feb 17, 1940. In German. 1.50

612-614 PB L 20547 — Process for extracting phenols. Ger. patent application I 66530 IVc/12q, dated Feb 19, 1940. In German. 1.50

615-617 PB L 20547 — Process for recovering extraction agents. Ger. patent application I 66546 IVb/12e, dated Feb 19, 1940. In German. 1.50

618-619 PB L 20547 — Process for recovery of extraction agents. Ger. patent application I 66547 IVb/12e, dated Feb 19, 1940. In German. 1.50

620-623 PB L 20547 — Process for producing oil-soluble antimony compounds. Ger. patent application I 66555 IVd/12o, dated Feb 22, 1940. In German. 1.50

624-625 PB L 20547 — Process for preparing unsaturated nitrogenous compounds. Ger. patent application I 66573 IVd/12p, dated Feb 22, 1940. In German. 1.50

626-633 PB L 20547 — Plates for exchange columns. Ger. patent application I 66589 IVa/12a, dated Feb 25, 1940. In German. 1.50

634-636 PB L 20547 — Process for producing succinic acid diamide or imide. Ger. patent application I 66602 IVd/IVd/12o, dated Feb 29, 1940. In German. 1.50

637-639 PB L 20547 — Process for stabilising solutions of the pancreatic blood-circulation hormone "Kallikrein." Ger. patent application I 66603 IVa/30h, dated Feb 29, 1940. In German. 1.50

640 PB L 20547 — Process for producing alpha-pyrrolidone. Ger. patent application I 66608 IVc/12p, dated Feb 29, 1940. In German. 1.50

641-648 PB L 20547 — Polymerisation process. Ger. patent application I 64104 IVc/39b, dated Mar 17, 1940. In German. 1.50

649-652 PB L 20547 — Process for producing plastics. Ger. patent application I 66118 IVc/12c, dated Dec 8, 1939. In German. 1.50

653-654 PB L 20547 — Equalisation agents. Ger. patent application I66627 IVd/8m, dated Mar 5, 1940. In German. 1.50

655-658 PB L 20547 — Emulsifiers and detergents. Ger. patent application I 66628 IVd/8o, dated Mar 5, 1940. In German. 1.50

659 PB L 20547 — Insecticides for textile pests. Ger. patent application I 66635 IVa/45 1, dated Mar 6, 1940. In German. 1.50

660-666 PB L 20547 — Process for producing higher-molecular amino compounds. Ger patent application I66641 IVc/12qu, Mar 6, 1940. In German. 1.50

667-668 PB L 20547 — Plastics for bone grafts. Ger. patent application I66642 IIa/30h, dated Mar 6, 1940. In German. 1.50

669-672 PB L 20547 — Process for producing condensation resins containing carboxyl groups. Ger. patent application I66653 IVc/12o, dated Mar 8, 1940. In German. 1.50

673-674 PB L 20547 — Process for producing aluminum fluoride. Ger. patent application I66654 IVb/121, dated Mar 8, 1940. In German. 1.50

675-676 PB L 20547 — Process for improving electrolytic chromium coatings. Ger. patent patent application I 66662 IVb/121, dated Mar 12, 1940. In German. 1.50

677-679 PB L 20547 — Process for producing antimony powder. Ger. patent application I66676 IVb/121, dated Mar 12, 1940. In German. 1.50

680-685 PB L 20547 — Instrument for determining dielectric constants. Ger. patent application I66681 VIIId/21e, dated Mar 13, 1940. In German. 1.50

686-689 PB L 20547 — Production and use of basic condensation products. Ger. patent application I 66686 IVc/12o, dated Mar 13, 1940. In German. 1.50

690-692 PB L 20547 — Process for treating fluorine-containing waste materials from aluminum manufacture. Ger. patent application I 66725 IVb/121, dated Mar 18, 1940.

693-696 PB L 20547 — Process for manufacturing hard plaster models. Ger. patent application I 66726 IIa/30h, dated Mar 19, 1940. In German. 1.50

697-699 PB L 20547 — Solutions of chlorination products of synthetic rubberlike materials. Ger. patent application I 66727 IVc/22h, dated Mar 19, 1940. In German. 1.50

700-702 PB L 20547 — Process for producing 1,4-tetramethylene diamine. Ger. patent application I 66751 IVc/12qu, dated Mar 21, 1940. In German. 1.50

703-704a PB L 20547 Process for improving the qualities of artificial cellulose fibers. Ger. patent application I 66752 IVd/8k, dated Mar 23, 1940. In German. 1.50

705-709 PB L 20547 Process for producing nitrogen compounds. Ger. patent application I 66753 IVc/12qu, dated Mar 23, 1940. In German. 1.50

710-715 PB L 20547 Process for separating carbon from gases. Ger. patent application I 66762 IVb/22f, dated Mar 28, 1940. In German. 1.50

716-717 PB L 20547 Process for manufacturing condensation products. Ger. patent application I 66767 IVc/12o, dated Mar 29, 1940. In German. 1.50

718-719 PB L 20547 Process for production of alkali aluminate. Ger. patent application I 66768 IVb/12n, dated Mar 29, 1940. In German. 1.50

720-721 PB L 20547 Method and device for continuously measuring or recording the pH of strongly alkaline solutions. Ger. patent application I 66769 IXb/42 1, dated Mar 29, 1940. In German. 1.50

722-728 PB L 20547 Process for continuous filtering, leaching, and washing of liquid-solid mixtures. Ger. patent application I 66770 IVb/12d, dated Mar 29, 1940. In German. 1.50

729-732 PB L 20547 Artificial materials. Ger. patent application I 64526 IVc/39b, dated May 6, 1939. In German. 1.50

733-737 PB L 20547 Compensating device for relative movements of apparatus or apparatus parts. Ger. patent application I 66164 XII/47f, dated Dec 19, 1939. In German. 1.50

738-751 PB L 20547 Process for preparing basic substituted compounds. Ger. patent application I 66807 IVc/12qu, dated Apr 2, 1940. In German. 1.50

752-756 PB L 20547 Process for determining oxygen in aqueous solutions. Ger. patent application I 66821 IXb/42, Apr 6, 1940. In German. 1.50

757-768 PB L 20547 Process for producing isosugar amines. Ger. patent application I 66822 IVc/12o, dated Apr 6, 1940. In German. 1.50

769-771 PB L 20547 Process for increasing reactivity of cellulose. Ger. patent application I 66840 IVc/12o, dated Apr 6, 1940. In German. 1.50

772-776 PB L 20547 Process for producing monoazo dyes. Ger. patent application I 66881 IVd/22a, dated Apr 17, 1940. In German. 1.50

777-783 PB L 20547 Process for producing asymmetric polyazo dyes. Ger. patent application I 66882 IVd/22a, dated Apr 12, 1940. In German. 1.5

784-785 PB L 20547 Process for production of a titanium dioxide pigment. Ger. patent application T 55665 IVb/22 1, dated Apr. 17, 1940. In German. 1.50

786-787 PB L 20547 Process for production of benzosulfinids. Ger. patent application I 66914 IVd/12o, dated Apr 26, 1940. In German. 1.50

788-790 891-899 PB L 20547 Process for producing azo dyes. Ger. patent application I 66934 IVd/22a, dated Apr 29, 1940. In German. 1.50
Nos. 791 thru 890 are missing due to faulty numbering machine.

900-902 PB L 20547 Process for producing chroming dyes. Ger. patent application I 66943 IVd/22b, n.d. In German. 1.50

903-904 PB L 20547 Process for preparing o-sulfobenzoic anhydride. Ger. patent application I 66944 IVd/12o, n.d. In German. 1.50

905-910 PB L 20547 Process for production of substantive azo dyes. Ger. patent application I 66945 IVd/22a, n.d. In German. 1.50

911-919 PB L 20547 Aromatic arsenic compounds and process for their production. Ger. patent application I 62535 IVc/12p, dated Sep 27, 1938. In German. 1.50

920-923 PB L 20547 Process for production of titanic chloride from clays. Ger. patent application I 66049 VI/40a, dated Dec 1, 1939. In German. 1.50

924-935 PB L 20547 Process for desilicifying aqueous fluids. Ger. patent application I 66277 IVb/85b, dated Jan 11, 1940. In German. 1.50

936-938 PB L 20547 Agent for increasing the adhesion of objects to the skin. Ger. patent application I 66965 IIa/30h, dated May 3, 1940. In German. 1.50

939-943 PB L 20547 Regulator for suction chamber rotary filters. Ger. patent application I 66966 IVb/12d, dated May 4, 1940. In German. 1.5

944-945 PB L 20547 Process for producing oil-soluble antimony compounds. Ger. patent application I 66979 IVd/12o, dated May 6, 1940. In German. 1.50

946-947 PB L 20547 Process for preparing beta-(alpha-furyl)-acrylic acid. Ger. patent application I 66980 IVc/12q, dated May 6, 1940. In German. 1.50

948-953 PB L 20547 Device for intimate mixing of vapors and liquids in exchange columns. Ger. patent application I 66984 IVb/12u, dated May 4, 1940. In German. 1.50

954-958 PB L 20547 Rotary filter with suction chambers. Ger. patent application I 66985 IVb/12d, dated May 7, 1940. In German. 1.50

959-961 PB L 20547 Process for preparing dialkyl ethers of 1,4-butylene glycol. Ger. patent application I 66998 IVd/12o, dated May 8, 1940. In German. 1.50

962-965 PB L 20547 Ventilation and observation tubes for rotary pipes, rotary furnaces, and similar apparatus. Ger. patent application I 67022 VI/40a, dated May 16, 1940. In German. 1.50

966-967 PB L 20547 Process for rendering textiles warp-proof. Ger. patent application I 67024 IVd/8k, dated May 16, 1940. In German. 1.50

968-970 PB L 20547 Detergents. Ger. patent application I 67037 IVd/8i, dated May 18, 1940. In German. 1.50

971-974 PB L 20547 Process for producing substituted alkylene diamines. Ger. patent application I 67049 IVc/12q, dated May 17, 1940. In German. 1.50

975-978 PB L 20547 Process for producing condensation products. Ger. patent application

I 67050 IVd/12o, dated May 21, 1940. In German. 1.50

979-981 PB L 20547 **Processing zinc-containing pyrite.** Ger. patent application I 67071 VI/40a, dated May 27, 1940. In German. 1.50

983-986 PB L 20547 **Process for manufacturing hollow bodies from any fibrous material.** Ger. patent application I 67094 VII/54f, dated May 28, 1940. In German. 1.50

987-990 PB L 20547 **Process for preparing leucosulfuric acid esters of 1-arylamino-anthraquinone.** Ger. patent application I 67112 IVd/22b, dated May 30, 1940. In German. 1.50

991-993 PB L 20547 **Disinfectants.** Ger. patent application I 67129 IVa/30i, dated Jun 1, 1940. In German. 1.50

994-996 PB L 20547 **Process for operating steam turbines.** Ger. patent application I 67139 IVb/95b, dated Jun 4, 1940. In German. 1.50

997-998 PB L 20547 **Detergents.** Ger. patent application I 67146 IVd/8i, dated Jun 5, 1940. In German. 1.50

999-1003 PB L 20547 **Process for producing organic diisocyanates.** Ger. patent application I 67156 IVc/12o, dated Jun 6, 1940. In German. 1.50

1004-1008 PB L 20547 **Manufacture of high-molecular products.** Ger. patent application I 67157 IVc/12o, dated Jun 6, 1940. In German. 1.50

1009-1014 PB L 20547 **Stabilizers for hardenable materials.** Ger. patent application I 67162 IVc/39b, dated Jun 6, 1940. In German. 1.50

1015-1020 PB L 20547 **Production of threads, bristles, or tapes.** Ger. patent application I 67163 IVc/29b, dated Jun 6, 1940. In German. 1.50

1021-1023 PB L 20547 **Detergent.** Ger. patent application I 67164 IVd/8i, dated Jun 7, 1940. In German. 1.50

1024-1025 PB L 20547 **Solders.** Ger. patent application I 67154 Ib/49h, dated Jun 7, 1940. In German. 1.50

1026-1028 PB L 20547 **Process for decolorizing titanic chloride.** Ger. patent application I 67176 IVb/12i, dated Jun 7, 1940. In German. 1.50

1029-1034 PB L 20547 **Process for preparing sulfonamide compounds.** Ger. patent application I 67177 IVb/12q, dated Jun 10, 1940. In German. 1.50

1035-1039 PB L 20547 **Process for producing cuprous oxide.** Ger. patent application I 67202 IVb/22f, dated Jun 14, 1940. In German. 1.50

1040-1042 PB L 20547 **Measuring chamber.** Ger. patent application I 67208 IXa/42h, dated Jun 15, 1940. In German. 1.50

1043-1046 PB L 20547 **Seed protectives against birds.** Ger. patent application I 67235 IVa/45 1, dated Jun 19, 1940. In German. 1.50

1047-1054 PB L 20547 **Process for producing cement rich in iron.** Ger. patent application I 67242 VI/80b, dated Jun 21, 1940. In German. 1.50

1055-1062 PB L 20547 **Process for manufacturing high-molecular products.** Ger. patent application I 67273 IVc/39b, dated Jun 26, 1940. In German. 1.50

1063-1065 PB L 20547 **Device for thermal concentration of amalgams.** Ger. patent application I 67274 VI/40a, dated Jun 26, 1940. In German. 1.50

1066-1067 PB L 20547 **Process for producing succinic acid.** Ger. patent application I 67275 IVd/12o, dated Jun 26, 1940. In German. 1.50

1068-1071 PB L 20547 **Process for preventing threads from splicing.** Ger. patent application I 67320 IVd/8k, dated Jun 28, 1940. In German. 1.50

1072-1075 PB L 20547 **Production of titanium dioxide.** Ger. patent application I 53868 IVb/22f, dated Jun 7, 1940. In German. 1.50

1076-1085 PB L 20547 **Process for producing coatings, paints, films, impregnations, etc.** Ger. patent application I 66687 IVd/75o, dated Mar 13, 1940. In German. 1.50

1086-1095 PB L 20547 **Process for producing shaped masses.** Ger. patent application I 66946 IVc/39b, dated May 3, 1940. In German. 1.50

1096-1099 PB L 20547 **Rubber mixtures.** Ger. patent application I 67352 IVc/39b, dated Jul 5, 1940. In German. 1.50

1100-1105 PB L 20547 **Process for producing diazo dyes.** Ger. patent application I 67368 IVd/22a, dated Jul 9, 1940. In German. 1.50

1106-1110 PB L 20547 **Short-circuit furnace.** Ger. patent application I 67410 VI/31a, dated Jul 15, 1940. In German. 1.50

1111-1117 PB L 20547 **Process for producing secondary amines of the anthraquinone series.** Ger. patent application I 67431 IVd/22b, Jul 13, 1940. In German. 1.50

1118-1124 PB L 20547 **Process for producing coatings.** Ger. patent application I 67448 IVc/22h, dated Jul 20, 1940. In German. 1.50

PB L 86683. I.G. FARBENINDUSTRIE, A.G., LEVERKUSEN, GERMANY. **Patent applications of the Leverkusen office, 1936-1940.** (Index to FIAT Microfilm Reel Patents 155, PB 20547) Mar 1946. 28 p. Price: Microfilm-$1.50 - Photostat-$3.00.

PB L 20866. I. G. FARBENINDUSTRIE A. G. **Reppe files. Patent applications, main laboratory, Ludwigshafen.** (FIAT Microfilm Reel C-80, (TOM 208) Frames 4896-5819) n. d. 924 F. Price: Microfilm-$6.00 - Enlargement print-$92.50.

This microfilm reel consists of a varied group of patent applications (in German) which include plastics, polyamides, and sulfonation products and sulfur compounds. The individual patents are listed below. These are available as enlargement prints only. An index to these patent applications gives the German titles and English translations of these titles. Much of the material in this reel is either illegible or can be read only with difficulty. Many of the enlargement prints reproduced so poorly as to be impossible to read. Enlargement prints of the index also are not very legible. In German.

PB Numbers Frames	Title	Price
L 86209	Preparation of carboxylic acids	

Frames 4896-4939 — or their functional derivatives. Ger. patent application I 66592 IVd/120. Feb 1940 - Oct 1943. In German. $ 3.00

L 65210 Frames 4940-4945 — Preparation of carboxylic acid derivatives. Mar 1940. In German. 1.00

L 65211 Frames 4946-4981 — Washing and cleaning preparations, softeners. Ger. patent application I 66729 IVd/82. Feb 1940 - Jul 1944. In German. 3.00

L 65212 Frames 4982-5022 — Preparation of coatings and thin molded shapes. Ger. patent application I 66732 IVe/39b,4- Jan 1940 - Dec 1942. In German. 3.00

L 65213 Frames 5023-5044 — Process for dehydrating water containing tetrahydrofuranes. Ger. patent application I 66792 IVe/12q. Feb 1940 - Sep 1943. In German. 2.00

L 65214 Frames 5045-5080 — Preparation of organic sulfur compounds. Ger. patent application I 66875 IVd/12o. Apr 1940 - Jul 1943. In German. 2.00

L 65215 Frames 5081-5085 — Preparation of dicarboxylic acids and their salts. Ger. patent application I 66883 IVd/12o. Mar 1940 - Jul 1943. In German. 2.00

L 65216 Frames 5086-5097 — Process for improving the heat-resistance of halogen-containing high molecular substances. Jun 1940. In German. 1.00

L 65217 Frames 5098-5110 — Preparation of N-substituted amino-carboxylic acids. Ger. patent application I 66925 IVe/17o. Apr 1940 - Nov 1943. In German. 2.00

L 65218 Frames 5111-5135 — Preparation of propargylesters. Ger. patent application I 66955 IVd/12q. Apr 1940 Sep 1943. In German. 2.00

L 65219 Frames 5136-5147 — Preparation of tetrahydrofurans. Ger. patent application I 66947 IVe/12q. Apr 1940 - Mar 1942. In German. 1.00
Frame 5136 is missing.

L 65220 Frames 5148-5169 — Preparation of oxidation products containing carboxylic acids. Ger. patent application I 67051 IVd/12o. Apr 1940 - Jul 1941. In German. 2.00

L 65221 Frames 5170-5175 — Preparation of high-molecular amines and quarternary amonium compounds. May 1940 - Apr 1941. In German. 1.00

L 65222 Frames 5176-5186 — Preparation of superpolyamides. Ger. patent application I 67059 IVe/39c. May 1940 - Mar 1943. In German. 1.00

L 65223 Frames 5187-5193 — Process for greasing of leather. Ger. patent application I 67130 IVd/28a. May 1940 - May 1944. In German. 1.00
Partly illegible

L 65224 Frames 5194-5227 — Preparation of films, coatings, impregnating agents, etc. Ger. patent application I 67187 IVe/39b4. Apr 1940 - Nov 1943. In German. 3.00

L 65225 Frames 5228-5245 — Preparation of soap cakes. Apr 1940 - Dec 1941. In German. Partly illegible. 2.00

L 65226 Frames 5246-5253 — Preparation of maleic anhydride. Jun 1940 - Mar 1941. In German. 1.00

L 65227 Frames 5254-5285 — Preparation of resin-like products. Ger. patent application I 67309 IVe/39c. Jun 1940 - Nov 1943. In German. 2.00

L 65228 Frames 5286-5290 — Preparation of sound-track-carriers. Nov.1939 - Mar 1941. In German. 1.00

L 65229 Frames 5291-5301 — Superpolyamide solutions. Jun 1940 - Oct 1940. In German. 1.00

L 65230 Frames 5302-5318 — Preparation of solvents for polyamides. Ger. patent application I 67287 IVe/29b. Nov 1940 - Mar 1944. In German. Partly illegible. 2.00

L 65231 Frames 5319-5337 — Plastic substances. Ger. patent application I 67323 IVe/39b,22. May 1940 - Dec 1942. In German. Legibility is poor. 2.00

L 65232 Frames 5338-5374 — Preparation of metal-containing azo dyestuffs suitable for dyeing organic plastic substances and their solutions. Ger. patent application I 67354 4d/22a. Jun 1940 - Aug 1943. In German. Not very legible. 3.00

L 65233 Frames 5375-5392 — Preparation of 1,4-diketones and 1,4-ketols. Ger. patent application I 67390 IVe/12o. Jul 1940 - Nov 1944. In German. Legibility poor. 2.00

L 65234 Frames 5393-5424 — Preparation of polyvinyl ethers. Ger. patent application I 67449 IVe/39c. Apr 1940 - Jun 1944. In German. Partly illegible. 3.00

PB L 65235 Frames 5425-5456 — Process for sizing paper. Jul 1940 - Apr 1944. In German. Frame 5425-5443 - illegible. Remainder not very legible. 3.00

L 65236 Frames 5457-5487 — Preparation of ester-like condensation products. Jun 1940 - Aug 1942. In German. Mainly illegible. 3.00

L 65237 Frames 5488-5501 — Preparation of diolefins. Jul 1940 - Feb 1944. In German. Partly illegible. 1.00

L 65238 Frames 5502-5518 — Adhesive layers. Apr 1940 - Jul 1942. In German. Partly illegible. 2.00

L 86583 Frames 5519-5528 — Preparation of alkyl-substituted pyrrolidines. Jul 1940 - May 1944. In German. Partly illegible. 2.00

L 65239 Frames 5529-5537 — Preparation of condensation products containing sulfate radicals. Jul 1940 - Apr 1942. In German. Not very legible. 1.00

L 65240 Frames 5538-5550 — Preparation of capillary-active sulfonation products. Jun 1940 - Aug 1941. In German 1.00

L 65241 Frames 5551-5571 — Preparation of decahydronaphthol. Jul 1940 - Jan 1943. In German. Frames 5551-5567 and 5570-5571 are illegible. 2.00

L 65242 Frames 5572-5598 — Preparation of acid amides. Jul 1940 - Nov 1943. In German. Frames 5572-5585 are partly illegible. 2.00

L 65243 Frames 5599-5612 — Preparation of acrylonitrile. Aug 1940 - Dec 1942. In German. 1.00
Frames 5599-5605 are illegible.

L 65244 Frames 5613-5622 — Preparation of olefins. Jul 1940 - Dec 1940. In German. 1.00
Partly illegible.

L 65245 Frames 5623-5672 — Preparation of nitrogen-containing derivatives of acrylic acid and their substitution products. Ger. I 67864 IVc/12o. Jul 1940 - Jan 1944. In German. 4.00
Frames 5623-5660 are illegible.

Frames 5673-5698 — These frames are illegible.

L 65246 Frames 5699-5717 — Manufacture of sulfonation products. Aug 1940 - Aug 1941. In German. 2.00
5699-5701 largely illegible.

L 65247 Frames 5718-5727 — Process for dehydration of azeotropic mixtures. Aug 1940 - Nov 1942. In German. 1.00
Largely illegible.

L 65248 Frames 5728-5729 — Preparation of glycols. Sep 1940 Apr 1942. In German. 1.00

L 65249 Frames 5730-5748 — Process for impregnating or coating of fibers. Ger. patent application I 67875 IVd/8k. May 1940 - Jul.1943. In German. 2.00
Half illegible.

L 65250 Frames 5749-5771 — Preparation of alcohol sulfonates. Sep 1940 - May 1944. In German. 2.00
Partly illegible.

L 65251 Frames 5772-5778 — Artists paints. Sep 1940 - Oct 1940. In German. 1.00

L 65252 Frames 5779-5813 — Process for continuous sulfonation of olefins. Ger. patent application I 67969 IVd/12o. Apr 1940 - Feb 1943. In German. 3.00
Not very legible.

L 65253 Frames 5814-5819 — Process for finishing textiles. Jan 1940 - Nov 1940. In German. 1.00
Not very ligible.

L 65208 — Reppe files. Patent applications, main laboratory, Ludwigshafen. Index. Not very legible. 1.00

PHOTOGRAPHIC AND OPTICAL GOODS (INCLUDING PHOTOGRAPHIC PROCESSING)

PB L 73165. LEITZ, ERNST, G.M.B.H., WETZLAR, GERMANY. Leitz patent applications for optical devices etc, including correspondence. (FIAT Microfilm Reel I 45, Frames 3849-4795) 1942-1943. 947 f. Price: Microfilm $6.00 - Enlargement Print-$95.00
This FIAT microfilm reel consists of 31 patent applications for optical and allied devices and includes correspondence with the German Patent Office and other interested parties. Individual items are listed below and will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $6.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
3849-3866 3903-3918 PB L 73165	Motor driven winding for roll-film cameras. Ger. patent application L 107881 IXa/57a, dated May 18, 1942. In German. Drawing.	$3.50
3867-3902 PB L 73165	HENRICI, P. (Inventor). Fixation for gages. Ger. patent application L 107846 IXb/42b, dated May 14, 1942. In German. Drawing.	4.00
3919-3950 PB L 73165	STROBIUS-GOECKING, C. and others. (Inventors). Vertical projector with a diapositive changer. Ger. patent application L 108193 IXa/42h, dated Jun 18, 1942. In German. Drawings.	3.50
3951-3976 PB L 73165	MAENNCHEN. (Inventor). Method for the production of low-reflection layers. Ger. patent application L 108210 VIb/32, dated Jun 19, 1942. In German.	3.00
3977-4048 PB L 73165	RIEPERT and others. (Inventors). Micrometric hardness tester. Ger. patent application L 108353 IXb/42k, dated Jul 6, 1942. In German. Drawings.	7.50
4049-4120 PB L 73165	ROSENTHAL. (Inventor). Electric amplification and control arrangement. Ger. patent application L 108400 VIIIb/21c, dated Jul 9, 1942. In German. Drawings.	7.50
4121-4129 PB L 73165	LEITZ, L. (Inventor). Method for fog prevention on transparent surfaces, especially in telescopes. Ger. patent application L 108498 IXa/42h, dated Jul 21, 1942. In German. Drawing.	1.50
4130-4188 PB L 73165	SEIBERT, A. (Inventor). Supplementary system for compensation of the chromatic enlargement difference of the image forming systems of microscopes. Ger. patent application L 108618 IXa/42h, dated Aug 1, 1942. In German. Drawings.	6.00
4189-4235 PB L 73165	LEITZ, L. and others. (Inventors). Arrangement for the production of coating layers on optically effective surfaces, particularly glass surfaces. Ger. patent application L 108600 VIb/32b, dated Aug 1, 1942. In German. Drawings.	5.00
4236-4264 PB L 73165	KALENSEE, W. (Inventor). Arrangement for precise displacement and fixation of mutual position of two movable elements. Ger. patent application L 109324 IXb/42d, dated Sep 12, 1942. In German. Drawings.	3.00
4265-4300 PB L 73165	WEISSENBERG, G. (Inventor). Articles made of mixed products of polymerisation of silicols and unsaturated hydrocarbons and production methods. Ger. patent application W 111552 IVc/39b, dated Aug 24, 1942. In German.	4.00
4301-4336 PB L 73165	STIETZER, R. (Inventor). Connection for mechanical precision instruments, especially for gun sights. Ger. patent application L 109105 IXa/42h, dated Sep 26, 1942. In German. Drawings.	4.00
4337-4354 PB L 73165	LEITZ, E. and others. (Inventors). Clamping arrangement for tools, especially cutting heads. Ger. patent application L 109326 Ib/49b, dated Oct 21, 1942. In German.	2.00
4355-4374 PB L 73165	BROSCHKE, H. (Inventor). Micrometric hardness tester operating on the	

penetration principle. Ger. patent application L 109327 IXb/42k, dated Oct 21, 1942. In German. 2.00
Drawings.

4375-4402 PB L 73165 MEINHARDT. (Inventor). Method and arrangement for adjustment of cutting and turning tools by means of a microscope. Ger. patent application L 109466 Ib/49d, dated Nov 4, 1942. In German. 3.00
Drawings.

4403-4416 PB L 73165 RIEPERT and others. (Inventors). Optical arrangement for surface examination. Ger. patent application L 109609 IXb/42b, dated Nov 16, 1942. In German. 1.50
Drawings.

4417-4427 PB L 73165 Device for locating of a moving object in space. Ger. patent application L 109691 IX/72f, dated Nov 26, 1942. In German. 1.50
Drawings.

4428-4466 PB L 73165 SEIBERT, A. Optical system with prisms inserted between the image-forming members. Ger. patent application L 109729 IXa/42h, dated Nov 27, 1942. In German. 4.00
Drawings.

4467-4481 PB L 73165 KALENSEE, W. (Inventor). Indicator for electric measuring devices. Ger. patent application L 109872 VIIIa/21a, dated Nov 27, 1942. In German. 1.50
Drawings.

4482-4504 PB L 73165 LEITZ, E. and others. (Inventors). Asymmetrical range finder. Ger. patent application L 110160 IXb/42c, dated Jan 11, 1943. In German. 2.50
Drawings.

4505-4526 PB L 73165 STEIN, W. and others. (Inventors). Electric range finder for cameras. Ger. patent application L 110043 IXa/57a, dated Dec 28, 1942. In German. 2.50
Drawings.

4527-4556 PB L 73165 BERSSENBRUGGE, W. (Inventor). Arrangement for coupling two cameras. Ger. patent application B 197120 IXa/57a, dated Feb 11, 1943. In German. 3.00

4557-4607 PB L 73165 SEIBERT, A. (Inventor). Supplementary optical system for microscopes. Ger. patent application L 110423 IXa/42h, dated Feb 4, 1943. In German. 5.50
Drawing.

4608-4638 PB L 73165 SCHÄFFER, I. (Inventor). Infinitely variable friction gear drive. Ger. patent application L 110438 XII/47h, dated Feb 4, 1943. In German. 3.50
Drawings.
Some frames will not reproduce well.

4639-4662 PB L 73165 LEITZ, E. (Inventor). Method for exact determination of the limits of a transparent body. Ger. patent application L 110485 IXa/42b, dated Feb 8, 1943. In German. 2.50
Drawings.

4663-4681 PB L 73165 MENHARDT and others. (Inventors). Optical measuring arrangement. Ger. patent application L 110724 IXb/42c, dated Mar 2, 1943. In German. 2.00
Drawings.

4682-4695 PB L 73165 ZIMMERMANN, O. (Inventor). Telescope with variable enlargement. Ger. patent application L 110754 IXa/42h, dated Mar 6, 1943. In German. 1.50
Drawings.

4696-4716 PB L 73165 HORNUNG, J. (Inventor). Enclosed ball guide for mechanical precision instruments. Ger. patent application L 111623 IXb/42d, dated May 27, 1943. In German. 2.50
Drawing.

4717-4746 PB L 73165 STÜTZER, R. (Inventor). Optical sighting device for direct aiming with firearms etc. Ger. patent application L 110725 XI/72f, dated Mar 2, 1943. In German. 3.00
Drawings.

4747-4764 PB L 73165 MULCH, I. (Inventor). Illumination arrangement for projection with direct light. Ger. patent application L 110898 IXa/42h, dated Mar 17, 1943. In German. 3.00
Drawing.

4765-4795 PB L 73165 WEISSENBERG, G. (Inventor). Method for the production of clear high-grade mixtures of polymerization products based on organic metal-silicates. Ger. patent application L 110897 IVc/39c, dated Mar 17, 1943. In German. 3.50

MISCELLANEOUS

PB L 20529. . I.G. FARBENINDUSTRIE A.G., HÖCHST, GERMANY. Patent applications of the Höchst office, 1943-1945. (FIAT Microfilm Reel Patents 151, Frames 4086-4731) 1943-1945. 695 f. Price: Microfilm-$6.00 - Enlargement Print-$69.50
This microfilm reel consists of a varied group of patent applications (in German) which include polymerization, dyeing and printing procedures, finishing of textiles, metal treatment and the manufacture of building materials using cement. The 167 individual patent applications are listed below together with their English titles and price. These are available as enlargement prints only. An index to these patent applications gives the German titles and their English translations.

PB Numbers / Frames	Title	Price
L 55074 Frames 4086-4088	Process for printing with vat dyes. Ger. patent application I 76177 IVd/8n, dated Nov 3, 1943. In German.	$1.00
L 55075 Frames 4089-4101	Condensation products from aldehydes and amines. Ger. patent application I 76203 IVc/12p, dated Nov 8, 1943. In German.	1.00
L 55076 Frames 4102-4103	Process for fine grinding. Ger. patent application I 76202 III/50c, dated Nov 6, 1943. In German.	1.00
L 55077 Frames 4104-4108	Electrode chain for measuring ion concentration. Ger. patent application I 76190 IXb.42 1, dated Nov 8, 1943. In German.	1.00
L 55078 Frames 4109-4111	Felting process. Ger. patent application I 76265 IVd/8k, dated Nov 17, 1943. In German.	1.00
L 55079 Frames 4112-4113	Apparatus for grinding and homogenization. Ger. patent application I 76297 III/50c, dated Nov 29, 1943. In German.	1.00
L 55080 Frames 4114-4118	Process for preparation of condensation compounds. Ger. patent application I 76339 IVc/12o, dated Nov 27, 1943. In German.	1.00
L 55081 Frames 4119-4123	Apparatus for pressing out liquids from solid-containing mixtures. Ger. patent application I 76457 Ib/58b, dated Dec 16, 1943. In German.	1.00

L 55082 Frames 4124-4130 — Pump for compressed low-boiling liquefied gases. Ger. patent application I 76427 Ia/17g, dated Dec 15, 1943. In German. 1.00

L 55083 Frames 4131-4133 — Condensation products from sulfamide and unsaturated aldehydes. Ger. patent application I 76499 IVc/12, dated Dec 18, 1943. In German. 1.00

L 55084 Frames 4134-4136 — Process for preparation of leucosulfuric acid esters. Ger. patent application I 76464 IVd/22b, dated Dec 20, 1943. In German. 1.00

L 55085 Frames 4137-4141 — Process for preparation of sensitizing dye-stuffs. Ger. patent application I 76480 IVd/22e, dated Dec 24, 1943. In German. 1.00

L 55086 Frames 4142-4145 — Process for bleaching of artificial fibers spun from a cellulose or cellulose derivative solution. Ger. patent application I 76481 IVc/29b, dated Dec 24, 1943. In German. 1.00

L 55087 Frames 4146-4148 — Process for preparing esters of dichloro-carbonic acid. Ger. patent application I 76 500 IVd/12o, dated Dec 24, 1943. In German. 1.00

L 55088 Frames 4149-4156 — Flotation process for sulfide and oxide minerals. Ger. patent application I 76468 VI/1c, dated Dec 24, 1943. In German. 1.00

L 55089 Frames 4157-4161 — Process for smoothing of round shapes by means of an oxygen burner. Ger. patent application I 76543 Ib/49h, dated Jan 3, 1944. In German. 1.00

L 55090 Frames 4162-4165 — Process for increasing the resistance of wool and wool-containing fiber mixtures against the influence of microorganisms. Ger. patent application I 76619 IVa/45 1, dated Jan 8, 1944. In German. 1.00

L 55091 Frames 4166-4170 — Addition to Application I 68699 IVc/39c. Ger. patent application I 76600 IVc/39c, dated Jan 10, 1944. In German. 1.00

L 55092 Frames 4171-4174 — Apparatus for grinding and homogenizing. Ger. patent application I 76620 IVb/12e, dated Jan 13, 1944. In German. 1.00

L 55093 Frames 4175-4178 — Hard rubber masses for chemically resistant linings. Ger. patent application I 76632 IVc/39b, dated Jan 13, 1944. In German. 1.00

L 55094 Frames 4179-4183 — Process for preparation of condensation compounds. Ger. patent application I 76669 IVd/12o, dated Jan 21, 1944. In German. 1.00

L 55095 Frames 4184-4187 — Process for preparation of basic ketones. Ger. patent application I 76688 IVc/12g, dated Jan 22, 1944. In German. 1.00

L 55096 Frames 4188-4192 — Plasticizers. Ger. patent application I 76689 IVc/39b, dated Jan 22, 1944. In German. 1.00

L 55097 Frames 4193-4194 — Oils for metal treatment. Ger. patent application I 74866 IVd/23c, dated Apr 24, 1943. In German. 1.00

L 55098 Frames 4195-4199 — Oils for metal treatment. Ger. patent application I 74886 IVd/23c, dated Apr 24, 1943. In German. 1.00

L 55099 Frames 4200-4202 — Process for obtaining from crude green bast fibers, fibers which can be spun on cotton spinning machines. Ger. patent application I 76730 IVc/29b, dated Feb 2, 1944. In German. 1.00

L 55100 Frames 4203-4204 — Process for manufacturing pitches for construction sealing purposes. Ger. patent application I 76743 IVc/12r, dated Feb 5, 1944. In German. 1.00

L 55101 Frames 4205-4206 — Process for filtering precipitates. Ger. patent application I 76801 IVb/12d, dated Feb 12, 1944. In German. 1.00

L 55102 Frames 4207-4208 — Process for preparing salts of sulfochloro or sulfobromoacetic acid. Ger. patent application I 76835 IVd/12o, dated Feb 9, 1944. In German. 1.00

L 55103 Frames 4209-4210 — Process for removing mercury salts from waste sulfuric acids, etc. Ger. patent application I 76802 IVb/121, dated Feb 14, 1944. In German. 1.00

L 55104 Frames 4211-4213 — Process for preparation of alkali salts of monochloroacetic acid. Ger. patent application I 76742 IVd/12o, dated Feb 3, 1944. In German. 1.00

L 55105 Frames 4214-4217 — Process for manufacturing porous, pliant spinnings from all kinds of fibers. Ger. patent application I 76852 IVc/29b, dated Feb 14, 1944. In German. 1.00

L 55106 Frames 4218-4223 — Process for preparing water-soluble sulfonic acids. Ger. patent application I 76853 IVd/12o, dated Feb 14, 1944. In German. 1.00

L 55107 Frames 4224-4225 — Process for preparation of ketones of the stearin series. Ger. patent application I 76820 IVc/12o, dated Feb 16, 1944. In German. 1.00

L 55108 Frames 4226-4228 — Printing process. Ger. patent application I 76916 IVa/15 1, dated Feb 19, 1944. In German. 1.00

L 55109 Frames 4229-4230 — Utilization of light ash and carbide slime. Ger. patent application I 76854 VIb/80b, dated Feb 21, 1944. In German. 1.00

L 55110 Frames 4231-4233 — Mixer. Ger. patent application I 77205 IVb/12e, dated Feb 17, 1944. In German. 1.00

L 55111 Frames 4234-4238 — Process for preparation of condensation compounds. Ger. patent application I 76888 IVd/12o, dated Feb 29, 1944. In German. 1.00

L 55112 Frames 4239-4245 — Process for finishing textiles. Ger. patent application I 76905 IVd/8k, dated Feb 28, 1944. In German. 1.00

L 55113 Frames 4246-4248 — Process for preparation of alkaline-earth nitrate solutions. Ger. patent application I 76930 IVb/12m, dated Mar 2, 1944. In German. 1.00

L 55114 Frames 4249-4252 — Process for preparation of acid-resistant and acid-tight cementing substances with silicate binding. Ger. patent application I 76989 IVd/221, dated Mar 10, 1944. In German. 1.00

L 55115 Frames 4253-4258 — Process for preparation of condensation compounds. Ger. patent application I 76987 IVc/12o, dated Mar 6, 1944. In German. 1.00

L 55116 Frames 4259-4263 — Drier. Ger. patent application I 77036 V/82a, dated Mar 6, 1944. In German. 1.00

L 55117 Frames 4264-4269 — Mixing worm (gear). Ger. patent application I 77037 V/2b, dated Mar 6, 1944. In German. 1.00

L 55118 Frames 4270-4271 — Means for accelerating ripening of fruits. Ger. patent application I 76974 IVa/45e, dated Mar 8, 1944. In German. 1.00

L 55119 Frames 4272-4277 — Mixing worm, (gear) Ger. patent application I 77206 VI/80a, dated Mar 11, 1944. In German. 1.00

L 55120 Frames 4278-4280 — Process for preparation of phenol-aldehyde resins which rapidly cold hardens. Ger. patent application I 76988 IVc/39c, dated Mar 10, 1944. In German. 1.00

L 55121 Frames 4281-4286 — Apparatus for carrying and emptying of moving and feeding buckets. Ger. patent application I 77076 IX/35b, dated Mar 13, 1944. In German. 1.00

L 55122 Frames 4287-4288 — Means for facilitating cold deformation of iron. Ger. patent application I 77077 Ib/7b, dated Mar 15, 1944. In German. 1.00

L 55123 Frames 4289-4291 — Process for finishing of fibrous materials. Ger. patent application I 77083 IVd/8k, dated Mar 23, 1944. In German. 1.00

L 55124 Frames 4292-4293 — Process for treating cloths, felts and similar products with agents distributed or dissolved in water. Ger. patent application I 77029 IVd/8k, dated Mar 18, 1944. In German. 1.00

L 55125 Frames 4394-4296 — Fly-paper adhesive. Ger. patent application I 77015 IVa/45l, dated Mar 15, 1944. In German. 1.00

L 55126 Frames 4297-4299 — Process for producing a stable lignite coke which is slow in reacting. Ger. patent application I 77371 VIb/10a, dated May 10, 1944. In German. 1.00

L 55127 Frames 4300-4301 — Process for producing stable, solid, complex, iodine-containing compounds. Ger. patent application I 77369 IVc/12p, dated May 10, 1944. In German. 1.00

L 55128 Frames 4302-4306 — Process for producing diaminodicyclohexylmethanes. Ger. patent application I 73403 IVc/12o, dated Oct 23, 1942. In German. 1.00

L 55129 Frames 4307-4310 — Tongs for piece goods. Ger. patent application I 77169 IX/35b, dated Apr 11, 1944. In German. 1.00

L 55130 Frames 4311-4312 — Production of pasteboards and paper. Ger. patent application I 77241 VII/55d, dated Apr 24, 1944. In German. 1.00

L 55131 Frames 4313-4321 — Process for producing 4-aminoquinoline compounds. Ger. patent application I 77231 IVc/12p, dated Apr 17, 1944. In German. 1.00

L 55132 Frames 4322-4323 — Process for producing fluorinated aliphatic hydrocarbons. Ger. patent application I 77240 IVd/12o, dated Apr 21, 1944. In German. 1.00

L 55133 Frames 4324-4327 — Process for producing symmetric 1,3-diketones. Ger. patent application I 77316 IVc/12o, dated Apr 21, 1944. In German. 1.00

L 55134 Frames 4328-4329 — Milling and mixing worm gear. Ger. patent application I 77347 III/50c, dated Apr 24, 1944. In German. 1.00

L 55135 Frames 4330-4332 — Process for impregnating molded bodies. Ger. patent application I 70927 IVc/39c, dated Nov 17, 1941. In German. 1.00

L 55136 — Process for producing chloroethylamine.

Frames 4333-4335 — I 77232 IVc/12q, dated Apr 17, 1944. In German. 1.00

L 55137 Frames 4336-4349 — Process for producing acetal-like condensation compounds. Ger. I 77389 IVd/12o, dated May 5, 1944. In German. 1.00

L 55138 Frames 4350-4351 — Rust preventing agent. Ger. patent application I 77390 IVc/22g, dated May 15, 1944. In German. 1.00

L 55139 Frames 4352-4353 — Process for producing acid resistant protective coatings. Ger. patent application I 77481 IVc/22g, dated May 20, 1944. 1.00

L 55140 Frames 4354-4356 — Process for producing drying binding agents. Ger. patent application I 77482 IVc/22h, dated May 20, 1944. In German. 1.00

L 55141 Frames 4357-4362 — Liquid distributor, (spray) Ger. patent application I 77432 Ia/17e, dated May 26, 1944. In German. 1.00

L 55142 Frames 4363-4366 — Process for cutting of metal by cutting torch. Ger. patent application I 77431 Ib/49h, dated May 23, 1944. In German. 1.00

L 55143 Frames 4367-4371 — Process for producing 4-aminoquinoline compounds. Ger. patent application I 77461 IVc/12p, dated May 26, 1944. In German. 1.00

L 55144 Frames 4372-4374 — Carrier fluid for magnetic method of testing for cracks. Ger. patent application I 77414 IXb/42k, dated May 15, 1944. In German. 1.00

L 55145 Frames 4375-4377 — Precipitation of polymers of 2-chloro-1, 3-butadiene from latex. Ger. patent application I 77517 IVc/39b, dated Jun 3, 1944. In German. 1.00

L 55146 Frames 4378-4379 — Milling and mixing worm gear. Ger. patent application I 77516 III/50c, dated Jun 2, 1944. In German. 1.00

L 55147 Frames 4380-4383 — Process for producing condensation compounds. Ger. patent application I 77518 IVc/39c, dated Jun 5, 1944. In German. 1.00

L 55148 Frames 4384-4388 — Process for producing low ash coal-oil-dispersions. Ger. patent application I 77548 VIb/10a, dated Jun 10, 1944. In German. 1.00

L 55149 Frames 4389-4391 — Process for producing self-hardening phenolaldehyde resin cements. Ger. patent application I 77602 IVc/39b, dated Jun 15, 1944. In German. 1.00

L 55150 Frames 4392-4394 — Process for obtaining sera, vaccines and similar preparations. Ger. patent application I 77603 IVa/30h, dated Jun 17, 1944. In German. 1.00

L 55151 Frames 4395-4399 — Process for improving the alkali resistance of wool. Ger. patent application I 77661 IVd/8k, dated Jun 26, 1944. In German. 1.00

L 55152 Frames 4400-4401 — Process for cutting with cutting torch. Ger. patent application I 77625 Ib/49h, dated Jun 24, 1944. In German. 1.00

L 55153 Frames 4402-4403 — Process for improving the alkali resistance of keratin fibers. Ger. patent application I 77725 IVd/8k, dated Jul 1, 1944. In German. 1.00

L 55154 Frames 4404-4406 — Turning-off device for fluid feed pipes. Ger. patent application I 77803 IVb/12g, dated Jul 18, 1944. In German. 1.00

L 55155 Frames 4407-4410 — Device for regulating and measuring of gas streams. Ger. patent application I 77726 VIb/4c, dated Jul 3, 1944. In German. 1.00

L 55156 Frames 4411-4413 — Process for producing carboxylic acids. Ger. patent application I 77828 IVd/12o, dated Jul 18, 1944. In German. 1.00

L 55157 Frames 4414-4419 — Process for producing condensation compounds. Ger. patent application I 77779 IVd/12o, dated Jul 15, 1944. In German. 1.00

L 55158 Frames 4420-4424 — Process for producing magnesia cement substances. Ger. patent application I 77869 VIb/80b, dated Jul 21, 1944. In German. 1.00

L 55159 Frames 4425-4426 — Process for producing compounds containing 1,3,5-triazine radicals. Ger. patent application I 77890 IVc/12p, dated Jul 25, 1944. In German. 1.00

L 55160 Frames 4427-4429 — Process for producing ethylenimine compounds. Ger. patent application I 78470 IVc/12p, dated Jul 26, 1944. In German. 1.00

L 55161 Frames 4430-4435 — Process for finishing keratin fibers. Ger. patent application I 77909 IVd/8k, dated Jul 31, 1944. In German. 1.00

L 55162 Frames 4436-4438 — Process for improving the alkali-resistance of keratin fibers. Ger. patent application I 77908 IVd/8k, dated Jul 31, 1944. In German. 1.00

L 55163 Frames 4439-4443 — Process for producing building plates, etc. Ger. patent application I 77910 IVc/80c, dated Jul 31, 1944. In German. 1.00

L 55164 Frames 4444-4446 — Process for producing higher molecular condensation products. Ger. patent application I 74759 IVc/39c, dated Apr 10, 1943. In German. 1.00

L 60891 Frames 4447-4449 — Process for producing higher molecular condensation products. Ger. patent application I 74758 IVc/39c, dated Apr 10, 1943. In German. 1.00

L 55165 Frames 4450-4453 — Process for magnetizing regulating throttles. Ger. patent application I 78060 VIIId/21d, dated Aug 9, 1944. In German. 1.00

L 55166 Frames 4454-4458 — Screw-conveyer. Ger. patent application I 78000 Ia/59e, dated Aug 12, 1944. In German. 1.00

L 55167 Frames 4459-4462 — Process for producing arsenic-containing compounds. Ger. patent application I 78014 IVc/12o, dated Aug 16, 1944. In German. 1.00

L 55168 Frames 4463-4466 — Process for producing organic arsenic compounds. Ger. patent application I 78015 IVc/12g, dated Aug 18, 1944. In German. 1.00

L 55169 Frames 4467-4470 — Process and device for testing the cold-resistance of films and foils. Ger. patent application I 78033 IXe/12k, dated Aug 18, 1944. In German. 1.00

L 55170 Frames 4471-4473 — Process for continuous production of building plates. Ger. patent application I 78016 VIc/80a, dated Aug 18, 1944. In German. 1.00

L 55171 Frames 4474-4479 — Process for producing light-weight building plates. Ger. patent applications I 78034 VIc/80b, dated Aug 18, 1944, and I 78035 VIc/80b, dated Aug 21, 1944. In German. 1.00

L 55172 Frames 4480-4483 — Process for producing nitrogen-containing condensation compounds. Ger. patent application I 78100 IVc/12o, dated Aug 22, 1944. In German. 1.00

L 55173 Frames 4484-4486 — Process for producing nitriles. Ger. patent application I 78131 IVd/12c, dated Aug 22, 1944. In German. 1.00

L 55174 Frames 4487-4489 — Process for producing water glass cements. Ger. patent application I 78077 IVd/221, dated Aug 21, 1944. In German. 1.00

L 55175 Frames 4490-4493 — Process for producing condensation products. Ger. patent application I 78067 IVd/12o, dated Aug 28, 1944. 1.00

L 55176 Frames 4494-4495 — Insecticide for horsefly larvae. Ger. patent application I 78068 IVa/45e, dated Aug 28, 1944. In German. 1.00

L 55177 Frames 4496-4499 — Process for producing selenocyanide compounds via selenazoles from aromatic amines. Ger. patent application I 78101 IVc/12q, dated Aug 29, 1944. In German. 1.00

L 55178 Frames 4500-4502 — Process for producing reaction products (polymers and co-polymers.) Ger. patent application I 78102 IVc/39c, dated Aug 31, 1944. In German. 1.00

L 55179 Frames 4503-4505 — Process for producing insoluble substances. Ger. patent application I 78132 IVc/39b, dated Aug 31, 1944. In German. 1.00

L 55180 Frames 4506-4509 — Process for producing alkylenimine compounds. Ger. patent application I 77958 IVb/121, dated Aug 7, 1944. In German. 1.00

L 55181 Frames 4510-4512 — Process for preventing phosphorus fires. Ger. patent application I 76153 IVb/61b, dated Nov 6, 1943. In German. 1.00

L 55182 Frames 4513-4516 — Device for determining scrubbing-resistance of textiles, etc. Ger. patent application I 78189 IXe/42k, dated Sep 8, 1944. In German. 1.00

L 55183 Frames 4517-4524 — Printing process (textiles.) Ger. patent application I 78225 IVc/57d, dated Sep 11, 1944. In German. 1.00

L 55184 Frames 4525-4527 — Improvement in the method of producing gypsum plates. Ger. patent application I 78273 VIb/80b, dated Sep 22, 1944. In German. 1.00

L 55185 Frames 4528-4529 — Process for preserving blood. Ger. patent application I 78274 IVa/30h, dated Sep 29, 1944. In German. 1.00

L 55186 Frames 4530-4534 — Process for producing polymeric emulsions. Ger. patent application I 78349 IVc/39c, dated Sep 29, 1944. In German. 1.00

L 55187 Frames 4535-4538 — Seed disinfectant. Ger. patent application I 78275 IVa/45 1, dated Oct 2, 1944. In German. 1.00

L 55188 Frames 4539-4542 — Lubricant. Ger. patent application I 78360 IVd/23c, dated Oct 9, 1944. In German. 1.00

L 55189 Frames 4543-4547 — Process for producing metallic sodium. Ger. patent application s I 78351 VIg/40a, and I 78392 VId/40a, dated Oct 9, 1944. In German. 1.00

L 55190 Frames 4548-4554 — Process for increasing usability of keratin fibers. Ger. patent application I 78379 IVd/8k, dated Oct 16, 1944. In German. 1.00

L 55191 Frames 4555-4556 — Process for producing oily substances. Ger. patent application I 78378 IVd/12o, dated Oct 16, 1944. In German. 1.00

L 55192 Frames 4557-4561 — Process for producing xylylene-bis-mercapto acids and their esters. Ger. patent application I 78412 IVd/12o, dated Oct 23, 1944. In German. 1.00

L 55193 Frames 4562-4564 — Process for conserving foodstuffs, etc. Ger. patent application I 78377 IVa/53c, dated Oct 19, 1944. In German. 1.00

L 55194 Frames 4565-4569 — Process for quick-freezing of foodstuffs, etc. Ger. patent application I 78411 Ia/17c, dated Oct 19, 1944. In German. 1.00

L 55195 Frames 4570-4572 — Process for quick freezing of foodstuffs, etc. Ger. patent application I 78376 IVa/53c, dated Oct 19, 1944. In German. 1.00

L 55196 Frames 4573-4575 — Process for producing selfhardening magnesite mixtures. Ger. patent application I 78444 VIc/80b, dated Oct 30, 1944. In German. 1.00

L 55197 Frames 4576-4577 — Utilization of condensation compounds. Ger. patent application I 78430 IVc/29b, dated Oct 27, 1944. In German. 1.00

L 55198 Frames 4578-4580 — Process for producing cellulose-containing molded objects from gypsum. Ger. patent application I 78457 VIc/80c, dated Nov 1, 1944. In German. 1.00

L 55199 Frames 4581-4587 — Process for producing building materials. Ger. patent application I 78458 VIc/80c, dated Nov 2, 1944. In German. 1.00

L 55200 Frames 4588-4589 — Mineralising agent for cellulose-containing additions to cemented building materials. Ger. patent application I 78459 VIb/80b, dated Nov 2, 1944. In German. 1.00

L 55201 Frames 4590-4591 — Use for porous foamy polyvinylchloride substances. Ger. patent application I 78469 IVc/39c, dated Nov 4, 1944. In German. 1.00

L 55202 Frames 4592-4596 — Process for producing non-hygroscopic fatty acid condensation products. Ger. patent application I 78484 IVd/12o, dated Nov 10, 1944. In German. 1.00

L 55203 Frames 4597-4600 — Multi-jaw chucks. Ger. patent application I 78505 Ic/49a, dated Nov 13, 1944. In German. 1.00

L 55204 Frames 4601-4603 — Process for protecting cellulose and cellulose-containing products against rot. Ger. patent application I 78498 IVd/8k, dated Nov 13, 1944. In German. 1.00

L 55205 Frames 4604-4608 — Process for obtaining solid sodium chlorite. Ger. patent application I 78567 IVc/12i, dated Nov 24, 1944. In German. 1.00

L 55206 Frames 4609-4612 — Process for producing wood-containing mortar and molded substances. Ger. patent application I 78549 VIb/80b, dated Nov 20, 1944. In German. 1.00

L 55207 Frames 4613-4620 — Milling and mincing worm screw. Ger. patent application I 78586 III/66b, dated Nov 23, 1944. In German. 1.00

L 55208 Frames 4621-4622 — Process for producing acetic acids substituted in three positions by chlorine and/or bromine. Ger. patent application I 76741 IVd/12o, dated Feb 2, 1944. In German. 1.00

L 55209 Frames 4623-4626 — Process for electro-thermal reductions. Ger. patent application I 78643 VIa/40c, dated Dec 13, 1944. In German. 1.00

L 55210 Frames 4627-4630 — Process for producing aluminum alloys. Ger. patent application I 78644 VIa/40a, dated Dec 13, 1944. In German. 1.00

L 55211 Frames 4631-4635 — Lubricant-testing device. Ger. patent application I 78626 IXb/42 1, dated Dec 12, 1944. In German. 1.00

L 55212 Frames 4636-4639 — Process for producing cellulose-containing cemented building materials. Ger. patent application I 78625 IVb/80b, dated Dec 12, 1944. In German. 1.00

L 55213 Frames 4640-4641 — Lubricant and packing material, especially for armatures in contact with oxygen, etc. Ger. patent application I 78696 IVd/23c, dated Dec 23, 1944. In German. 1.00

L 55214 Frames 4642-4645 — Process for protecting cheeses during their ripening period. Ger. patent application I 78698 IVa/53a, dated Dec 29, 1944. In German. 1.00

L 55215 Frames 4646-4649 — Process for producing cellulose-containing, clay-cement molded building materials. Ger. patent application I 78678 VIb/80b, dated Dec 23. 1944. In German. 1.00

L 55216 Frames 4650-4652 — Process for producing weights. Ger. patent application I 78687 IVc/39b, dated Dec 29, 1944. In German. 1.00

L 55217 Frames 4653-4655 — Process for decreasing fiber damages during dyeing and printing of cellulose fibers with vat-dyestuffs. Ger. patent application I 78720 IVd/8m, dated Jan 6, 1945. In German. 1.00

L 55218 Frames 4656-4661 — Process for polymerising or co-polymerising unsaturated compounds. Ger. patent application I 78697 IVc/39c, dated Dec 29, 1944. In German. 1.00

L 55219 Frames 4662-4664 — Process for producing polyvinylacetal emulsions. Jan 15, 1945. In German. 1.00

L 55220 Frames 4665-4670 — Process for more effective metal treatment (by using chemical coatings.) Ger. patent application I 78700 IVd/23c, dated Dec 29, 1944. In German. 1.00

L 55221 Frames 4671-4672 — Process for producing shaped building materials. Jan 15, 1945. In German. 1.00

L 55222 Frames 4673-4676 — Process for foam flotation. Ger. patent application I 78721 VIb/1c, dated Jan 10, 1945. In German. 1.00

L 55223 Frames 4677-4680 — Process for producing ethylenimine compounds. Ger. patent I 78722 IVc/12p, dated Jan 10, 1945. In German. 1.00

L 55224 Frames 4681-4685 — Process for reserving of dyes of ester salts of leuco vat dyes on fibrous material. Jan 11, 1945. In German. 1.00

L 55225 Frames 4686-4690B — Process for fixing pigments on fibrous materials. Jan 25, 1945. In German. 1.00

L 55226 Frames 4691-4692 — Process for converting cystine groups of keratin fibers into cysteine groups. Jan 15, 1945. In German. 1.00

L 86842 Frame 4693 — Process for etching dyed polyamid fibers. Jan 15, 1945. In German. 1.00

L 55227 Frames 4694-4696 — Process for producing prints on polyamide fibers with vat dyes. Jan 15, 1945. In German. 1.00

L 55228 Frames 4697-4700 — Process for preventing yellowing of wool. Jan 16, 1945. In German. 1.00

L 55229 Frames 4701-4702 — Process for increasing the utility of animal fibers and skins. Jan 19, 1945. In German. 1.00

L 55230 Frames 4703-4711 — Device for producing filled capsules. Jan 31, 1945. In German. 1.00

L 55231 Frames 4712-4715 — Process for producing phosphate layers on metals. Jan 17, 1945. In German. 1.00

L 55232 Frames 4716-4719 — Process for producing phosphate layers on metals. Jan 17, 1945. In German. 1.00

L 55233 Frames 4720-4723 — Process for producing building materials from gypsum and filler. Feb 7, 1945. In German. 1.00

L 55234 Frames 4724-4725 — Process for producing acid- and alkali-resistant masses of the quick-setting type. Feb 12, 1945. In German. 1.00

L 55235 Frames 4726-4727 — Process for producing higher molecular condensation products. Feb 7, 1945. In German. 1.00

L 55236 Frames 4728-4729 — Process for fighting dipters. Ger. patent application I 78045 IVa/45 l, dated Aug 22, 1944. In German. 1.00

L 55237 Frames 4730-4731 — Process for fighting dipters. Ger. patent application I 78046 IVa/45 l, dated Aug 22, 1944. In German. 1.00

L 55073 — Patent applications of the Höchst office. Index. 2.00

PB L 70434. DEUTSCHES MUSEUM, PATENTARCHIV, MUNICH, GERMANY. Patents in various fields. (FIAT Microfilm Reel E 31, Frames 4-954) Jan-Dec 1944. 950 f. Price: Microfilm-$6.00 - Enlargement print-$95.00

This reel prepared by FIAT investigators in Germany consists of 367 patents issued between January and December 1944, mostly January 1944, ranging from Nos. 744579-744974, except for a few missing numbers. Individual patents are listed as separate items below and will be available as enlargement prints. This entire reel of patents may be purchased as a microfilm for $6.00. Please include PB, patent and frame numbers when ordering individual items. In German.

Frames	Title	Price
4-5 PB L 70434	VEREINIGTE DEUTSCHE METALLWERKE A.G., FRANKFURT. Sintering of heat conducting material. Ger. patent 744 579, Feb 22, 1944. Application V 36 471 VIa/40b dated Feb 7, 1940. Inventor: Schulze. In German.	$1.50
6-7 PB L 70434	DEUTSCHE GOLD- UND SILBERSCHEIDE-ANSTANT VORMALS ROESSLER, FRANKFURT, MAIN. The use of silver-palladium alloys for writing pens. Ger. patent 744 580, Jan 20, 1944. Application D 79 095 VIa/40b dated Oct 20, 1938. Inventor: Spanner. In German.	1.50
8-9 PB L 70434	FR. KAMMERER A.G., PFORZHEIM. Gold- copper alloy. Ger. patent 744 581, Jan 21, 1944. Application K 162 390 VIa/40b dated Oct 8, 1941. Inventor: Bengough. In German.	1.50
10-12 PB L 70434	RHEINMETALL BORSIG A.G., BERLIN. Arrangement for time tracers on photographic recorders. Ger. patent 744 582, Jan 20, 1944. Application R 106 792 IXb/42d dated Jan 20, 1940. Inventor: Kretdel. In German. Drawings.	1.50
13-15 PB L 70434	PATIN, ALBERT (Inventor). Device for observing and measuring velocity or distance. Ger. patent 744 583, Jan 20, 1944. Application P 80077 IXb/42c dated Dec 1, 1939. In German.	1.50
16-18 PB L 70434	SCHWARTZ, WERNER (Inventor). Lifting mechanism for ploughs operated by a spur gear transmission or grab wheel. Ger. patent 744 584, Jan 20, 1944. Application Sch 115 565 III/45a dated Apr 22, 1938. In German. Drawings.	1.50
19-21 PB L 70434	REHER, BERNHARD (Inventor). Device for feeding flour to bees. Ger. patent 744 586, Jan 20, 1944. Application R 114 559 III/45h dated Nov 7, 1942. In German.	1.50
22-23 PB L 70434	REICHHART, VALENTIN (Inventor). Device for killing vermin such as field mice and voles, etc., by smoke or poisonous gases. Ger. patent 744 587, Jan 20, 1944. Application R 102 546 III/45k dated Jun 10, 1938. In German. Drawings.	1.50
24-27 PB L 70434	SCHNÜRLE, ADOLF, STUTTGART-BAD CANNSTADT. Control device for fuel injection devices of internal combustion engines. Ger. patent 744 588, Jan 20, 1944. Application Sch 102 112 Ia/46b-2 dated Sep 6, 1933. In German. Drawings.	1.50
28-29 PB L 70434	MAHLE KOMM.-GES., STUTTGART-BAD CANNSTADT. Light metal piston for internal combustion engines. Ger. patent 744 589, Jan 20, 1944. Application M 155 755 Ia/46c-1 dated Oct 31, 1942. Inventor: Meyer-Rässler, Erich. In German. Addition to patent 716 606.	1.50
30-31 PB L 70434	JUNKERS FLUGZEUG-UND-MOTORENWERKE A.G., DESSAU. Suspension device for electrolytic hard chroming of several superimposed cylindrical workpieces provided with a chromium layer internally or externally or on both sides. Ger. patent 744 590, Jan 20, 1944. Application J 66 395 VIa/48a dated Jan 31, 1940. Inventor: Krell. In German. Drawing.	1.50
32-34 PB L 70434	SENGER, ALFRED, ISERLOHN. Fully automatic mechanism for the manufacture of bullet cores by means of machining tools. Ger. patent 744 591, Jan 21, 1944. Application S 141 113 Ib/49b dated May 23, 1940. In German. Drawings.	1.50
35-36 PB L 70434	GÜNTHER, C.F. & CO., HAMBURG. Feed containing cellulose. Ger. patent 744 592, Jan 21, 1944. Application G 104 646 IVb/53g dated Mar 7, 1941. Inventors: Feaux de Lacroix and Dargats. In German.	1.50

37-38 PB L 70434 GRÄF, SIEGFRIED (Inventor). Method for the production of feed high in proteins. Ger. patent 744 593, Jun 21, 1944. Application G 103 000 IVb/53g dated Feb 12, 1941. In German. 1.50

39-41 PB L 70434 HERBST, WALTER (Inventor). Method for the production of cellulose meal. Ger. patent 744 595, Jan 21, 1944. Application H 159 757 IVb/55b dated Jun 3, 1939. In German. 1.50

42-44 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Method for the perfect reproduction of sound recordings. Ger. patent 744 596, Jul 21, 1944. Application I 69 604 IVa/57b dated May 17, 1941. Inventors: Eggert, John and Küster, Alfred. In German. Graphs. 1.50

45-47 PB L 70434 JUNKERS FLUGZEUG-UND-MOTORENWERKE A.G., DESSAU. Construction device for pfoduction line manufacture of large construction parts, particularly airplane parts. Ger. patent 744 597, Jan 21, 1941. Application I 69 963 XI/62b dated Jul 2, 1941. Inventors: Zickler, Alfred and Griebsch, Franz. In German. Drawings. 1.50

48-49 PB L 70434 GESELLSCHAFT FÜR FÖRDERANLAGEN ERNST HECKEL M.B.H., SAARBRÜCKEN. Automatic filling machine with material protecting device for conveying of containers. Ger. patent 744 598, Jan 21, 1944. Application G 102 514 XI/81c dated Nov 10, 1940. Inventor: Thalacker. In German. Drawing. 1.50

50-51 PB L 70434 GROSS, FRITZ. (Inventor). Tension device for the forward and backward motion, of a vise jaw with thrust and holding bearing. Ger. patent 744 599, Jan 21, 1944. Application G 104 206 XI/87a dated Oct 11, 1941. In German. Drawings. 1.50

52-53 PB L 70434 SCHAFFGOTTSCH BERGWERKSGESELLSCHAFT M.B.H., GLEIWITZ. Method for the manufacture of Cumarone resin. Ger. patent 744 600, Jan 21, 1944. Application D 72 055 IVd/12r dated Feb 9, 1936. In German. 1.50

54-55 PB L 70434 DEUTSCHE GOLD- UND SILBER SCHEIDEANSTALT VORMALS ROESSLER, FRANKFURT, MAIN. Flotation agent. Ger. patent 744 601, Jan 21, 1944. Application D 74 790 VIb/1c dated Mar 7, 1937. Inventors: Götte and Giesler. In German. 1.50

56-57 PB L 70434 MESSER & CO., G.M.B.H., FRANKFURT, MAIN. Autogenous torch. Ger. patent 744 602, Jan 21, 1944. Application M 153 631 VIb/4g dated Mar 17, 1942. Inventors: Bechtle, Richard and Habermehl, Erich. In German. Drawing. 1.50

58-60 PB L 70434 BERGTECHNIK G.M.B.H., LÜNEN. Automatic feeding mechanism for drill hammers. Ger. patent 744 603, Jan 21, 1944. Application B 195 848 VIb/5b dated Oct 19, 1941. Inventor: Rauschner, Richard. In German. Drawings. 1.50

61-63 PB L 70434 FLOTTMANN A.G., HERNE. Feeding mechanism for pneumatic drills or impact devices. Ger. patent 744 604, Jan 21, 1944. Application F 89 972 VIb/5b dated May 11, 1941. Inventors: Appelberg and Kirschbaum. In German. Drawings. 1.50

64-65 PB L 70434 DEUTSCHE BERGIN A.G., FÜR HOLZHYDROLYSE, MANNHEIM-RHEINAU. Method for increasing the fat content in yeast. Ger. patent 744 607, Jan 21, 1944. Application D 87 559 IVa/6b dated Apr 17, 1942. Inventor: Kipphan. In German. 1.50

66-68 PB L 70434 RADEBERGER EXPORTBIERBRAUEREI A.G., RADEBERG. Method for manufacturing low alcoholic or alcohol-free beer or beerlike beverage. Ger. patent 744 608, Jan 21, 1944. Application R 109 079 IVa/6b dated Jan 7, 1941. Inventors: Horch and Rehberg. In German. 1.50

69-70 PB L 70434 CHEMISCHE FABRIK STOCKHAUSEN & CIE, KREFELD. Detergent, wetting, dispersing and emulsifying agent. Ger. patent 744 609, Jan 21, 1944. Application C 47 964 IVd/8o dated Jun 7, 1933. In German. 1.50

71-72 PB L 70434 F. HOFFMANN-LAROCHE & CO., A.G., BASEL, SWITZERLAND. Method of preparing β-Alanine. Ger. patent 744 610, Jan 21, 1944. Application H 168 875 IVc/12q dated Jul 7, 1942. Inventors: Ruggli, Paul and Businger, Albert. In German. 1.50

73-75 PB L 70434 HENCKEL & CIE, G.M.B.H., DÜSSELDORF. Soap substitute. Ger. patent 744 611, Jan 22, 1944. Application H 144 916 IVd/12s dated Sep 11, 1935. In German. 1.50

76-77 PB L 70434 ATLAS-WERKE A.G., BREMEN. Heat-exchanger, particularly waste heat feed water preheater. Ger. patent 744 612, Oct 2, 1944. Application A 91 815 X/13b dated Aug 9, 1940. Inventors: Laban and Schwarz. In German. Drawing. 1.50

78-79 PB L 70434 SIEMENS-SCHUCKERTWERKE A.G., BERLIN-SIEMENSSTADT. Spacer for the overhead line for electric railroads. Ger. patent 744 613, Feb 26, 1944. Application S 142 606 VIIId/20k dated Oct 15, 1940. Inventor: Rastle. In German. 1.50

80-81 PB L 70434 LORENZ, C., A.G., BERLIN-TEMPELHOF. Device for producing Morse code signals which produces impulses according to the feeding speed of the perforated tape. Ger. patent 744 614, Jan 21, 1944. Application R 106 332 VIIIa/21a-1 dated Nov 5, 1939. Inventor: Vollbrecht. In German. 1.50

82-84 PB L 70434 N.V. PHILIPS GLOEILAMPENFABRIEKEN, EINDHOVEN, HOLLAND. Microphone for noisy environment. Ger. patent 744 615, Jan 21, 1944. Application N 45 476 VIIIa/21a-2 dated Mar 5, 1942. Inventor: Vermeulen. In German. 1.50

85-86 PB L 70434 PHILIPS PATENTVERWALTUNG G.M.B.H., BERLIN. Circuit with two

secondary emission tubes. Ger. patent 744 616, Jan 21, 1944. Application P 81 463 VIIIa/21a-2 dated Nov 1, 1940. Inventors: Strutt and Van der Ziel. In German. 1.50
Drawing.

87-88 PB L 70434 TELEFONBAU UND NORMALZEIT G.M.B.H., FRANKFURT, MAIN. Circuit for introducing certain selected procedures by the parties of a telephone installation. Ger. patent 744 617, Jan 22, 1944. Application T 56 191 VIIIa/21a-3 dated Sep 14, 1941. Inventor: Wirth. In German. 1.50

89-92 PB L 70434 TELEFONBAU UND NORMALZEIT G.M.B.H., FRANKFURT, MAIN. Dial system particularly for telephone installations with contacts in several planes. Ger. patent 744 618, Jan 21, 1944. Application T 56 261 VIIIa/21a-3 dated Dec 4, 1938. Inventor: Hebel. In German. 1.50
Drawings.

93-100 PB L 70434 SIEMENS & HALSKE A.G., BERLIN-SIEMENSSTADT. Circuit arrangement for telecommunication systems using dial operation particularly for telephone installations. Ger. patent 744 619, Nov 23, 1944. Application S 147 351 VIIIa/21a-3 dated Oct 21, 1941. Inventors: Scheunert and Lurk. In German. 1.50
Drawings.

101-104 PB L 70434 PINTSCH, JULIUS, KOM.-GES., BERLIN. Electron tube for the initial excitation of ultrashort waves. Ger. patent 744 620, Jan 21, 1944. Application N 36 086 VIIIa/21a-4 dated Dec 17, 1933. In German. 1.5[illegible]

105-106 PB L 70434 VOIGT & HAEFFNER A.G., FRANKFURT-AM-MAIN. Blowing chamber for arc light extinguishing by means of a gas which flows at an angle to the light arc. Ger. patent 744 622, Jan 21, 1944. Application V 39 152 VIIIb/21c dated Sep 10, 1942. Inventor: Friebe. In German. 1.50
The 2d page of this patent will not reproduce well.

107-110 PB L 70434 SIEMENS-SCHUCKERTWERKE A.G., BERLIN-SIEMENSSTADT. Drive for the paper roll of rotary printing machines. Ger. patent 744 623, Nov 17, 1944. Application S 142 279 VIIId/21c dated Sep 15, 1940. Inventor: Roth. In German. 1.50
Drawings.

111-112 PB L 70434 ALLGEMEINE ELEKTRICITÄTSGESELLSCHAFT, BERLIN. Excess current fuse. Ger. patent 744 624, Jan 21, 1944. Application L 95 667 VIIIb/21c dated Sep 25, 1938. Inventor: Wehle. In German. 1.50
Drawing.

113-115 PB L 70434 SIEMENS & SCHUCKERTWERKE A.G., BERLIN-SIEMENSSTADT. Commutator. Ger. patent 744 625, Jan 21, 1944. Application S 141 183 VIIId/21d-1 dated May 31, 1940. Inventor: Leukert. In German. 1.50
Drawing.

116-117 PB L 70434 TELLERT, FRITZ (Inventor). Single or polyphase motor with quadrangular stator plates. Ger. patent 744 626, Jan 21, 1944. Application T 58 378 VIIId/21d^2 dated Dec 5, 1942. In German. 1.50
Addition to patent 694 327. The 2d frame of this patent will not reproduce well.

118-120 PB L 70434 TELEFUNKEN-GESELLSCHAFT FÜR DRAHTLOSE TELEGRAPHIE M.B.H., BERLIN-ZEHLENDORF. Oscillation rectifier in a push-pull or change-pole circuit. Ger. patent 744 627, Jan 21, 1944. Application T 57 506 VIIId/21d-2 dated Jun 6, 1942. Inventor: Leifer. In German. 1.50
Drawings.

121-122 PB L 70434 POMPER, ALBERT, BERLIN-FROHNAU. Impregnating or baking agent for electric coils. Ger. patent 744 628, Jan 22, 1944. Application P 83 688 VIIIc/21g dated Jan 22, 1942. Inventor: Mühlhausen. In German. 1.50

123-125 PB L 70434 SIEMENS-SCHUCKERTWERKE A.G., BERLIN-SIEMENSSTADT. Cooling device for a metal vapor discharge vessel particularly for mercury vapor rectifiers. Ger. patent 744 629, Jan 21, 1944. Application S 132 787 VIIIc/21g dated Jul 2, 1938. Inventor: Killinger. In German. 1.50
Drawings.

126-127 PB L 70434 HEIDENPETER, FRIEDRICH (Inventor). Lubricant for drop forging. Ger. patent 744 630, Jan 22, 1944. Application H 164 382 IVd/23c dated Jan 20, 1941. In German. 1.50

128-129 PB L 70434 GMINDER, ULRICH, G.M.B.H., REUTLINGEN. Method and device for dissolving and further delignification of wet bast-fiber. Ger. patent 744 631, Jan 21, 1944. Application G 104 683 VII/29a dated Jan 14, 1942. Inventor: Gminder, Emil. In German. 1.50
Drawings.

130-131 PB L 70434 MARHOLT, KARL (Inventor). X-ray apparatus with reversible base. Ger. patent 744 632, Oct 2, 1944. Application M 150 455 IXa/30a dated Apr 1, 1941. In German. 1.50
Drawings.

132-133 PB L 70434 REICHSVERBAND DEUTSCHER DENTISTEN, BERLIN-SCHÖNEBERG. Glue for connecting dentures with each other or with natural teeth. Ger. patent 744 633, Jun 13, 1944. Application R 103 124 IXa/30b dated Aug 16, 1938. Inventor: Schnebel. In German. 1.50

134-135 PB L 70434 WIPLA-OSNABRÜCK H. BITTER BORM. BIOS GESELLSCHAFT, OSNABRÜCK. Plate for a set of artificial teeth. Ger. patent 744 634, Jan 21, 1944. Application B 190 763 IXa/30b dated May 22, 1940. Inventor: Bitter. In German. 1.50
Addition to patent 693 480.
Drawing.

136-138 PB L 70434 KÜRTH, RUDOLF (Inventor). Device for treating the human body with ultrasonic waves. Ger. patent 744 635, Jan 13, 1944. Application K 157 628 IXa/30f, dated May 19, 1940. In German. 1.50
Drawings.

139-141 PB L 70434 WINDEIT, KARL (Inventor). Furnace for turkish baths. Ger. patent 744 636, Jan 25, 1944. Application W 110 064 IIa/30f dated Dec 5, 1941. In German. 1.50

142-143 PB L 70434 HEYL & CO., CHEMISCH-PHARMAZEUTISCHE FABRIK, BERLIN UND FRITZ UNGER, BERLIN-HALENSEE. Method for process canning of whale liver. Ger. patent 744 637, Jan 22, 1944. Application H 156 133 IVa/30h dated Jun 12, 1938. Inventor: Unger. In German. 1.50

144-146 PB L 70434 GESELLSCHAFT FÜR CHEMISCHE INDUSTRIE, BASEL, SWITZERLAND. Method of concentrating gonadotropic hypophysis hormones. Ger. patent 744 638, Jan 22, 1944. Application G 101 401 IVa/30h dated Mar 3, 1940. Inventors: Hartmann and Bens. In German. 1.50

147-149 PB L 70434 MONZER, ARTHUR (Inventor). Sand core with glazed surface layer and method for its production. Ger. patent 744 640, Jan 21, 1944. Application M 152 324 VIa/31c dated Nov 4, 1941. In German. 1.50 Drawing.

150-152 PB L 70434 GEBR. BOEHRINGER G.M.B.H., GÖPPINGEN. Center locking device for a casting mold. Ger. patent 744 641, Jan 21, 1944. Application B 198 402 VIa/31c dated May 30, 1942. Inventor: Lipp. In German. 1.50 Addition to patent 727 292.

153-155 PB L 70434 HORAK, JIRI (Inventor). Method and operation of a press-casting machine for metal. Ger. patent 744 642, Jan 21, 1944. Application H 165 533 VIa/31c dated Jun 4, 1944. In German. 1.50 Drawings.

156-157 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT,MAIN. Method for the thermal production of Ca-Al alloys. Ger. patent 744 644, Jan 22, 1944. Application I 57 000 VIa/40b dated Jan 30, 1937. Inventors: Suchy and Seliger. In German. 1.50

158-159 PB L 70434 REINDL & NIEBERDING G.M.B.H., BERLIN. Hand gauge for testing screw threads. Ger. patent 744 645, Jan 21, 1944. Application R 102 349 IIb/42b dated May 19, 1938. Inventor: Petermann. In German. 1.50 Drawings.

160-162 PB L 70434 WANDERER-WERKE A.G., SIEGMAR-SCHÖNAU. Calculating machine that prints on a paper tape. Ger. patent 744 646, Jan 21, 1944. Application W 106 836 IIb/42m dated Jun 2, 1938. Inventor: Knackfuss. In German. 1.50 Drawings.

163-165 PB L 70434 SONDERBAU VON LANDMASCHINEN, HANS SACK, K.G., LEIPZIG. Potato harvesting machine with motor driven shaking screen. Ger. patent 744 647, Jan 21, 1944. Application S 135 082 III/45c dated Dec 21, 1938. Inventor: Sack, Hans. In German. 1.50 Drawings.

166-168 PB L 70434 BUTTNER-WERKE A.G., KREFELD-VERDINGEN. Dry-cleaning device for leafy plants. Ger. patent 744 648, Jan 21, 1944. Application B 198 506 III/45e dated Jun 7, 1942. Inventor: Schneider. In German. 1.50 Drawing.

169-171 PB L 70434 VOLLMER, JOSEF. Scavenging and charging device. Ger. patent 744 649, Jan 21, 1944. Application V 39 842 Ia/46a-4 dated Mar 21, 1943. Inventors: Vollmer and Isendahl. In German. 1.50 Addition to patent 733 260. Drawings.

172-173 PB L 70434 SOCIÉTÉ DE PRODUITS CHIMIQUES DES TERRES RARES, PARIS. Method for increasing the corrosion resistance of an object plated with a metal layer. Ger. patent 744 650, Jan 27, 1944. Application S 148 332 VIa/48d dated Jan 4, 1942. Inventor: Frasch. In German. 1.50

174-177 PB L 70434 ALLGEMEINE ELECTRICITÄTS-GESELLSCHAFT, BERLIN. Control for the table of milling machines with separate milling and feeding motors. Ger. patent 744 651, Jan 21, 1944. Application A 84 313 Ib/49b dated Sep 25, 1937. Inventor: Staffel. In German. 1.50 Drawings.

178-179 PB L 70434 CUTTAT, JULIUS ROBERT (Inventor). Milling machine with slide which can be adjusted vertically and horizontally on the support. Ger. patent 744 652, Jan 21, 1944. Application C 55 980 Ib/49b dated Mar 7, 1941. In German. 1.50 Drawings.

180-183 PB L 70434 FICKERT, HANS, FRANKFURT, MAIN. Reversing control for the milling and caliper supports of profiling milling machines. Ger. patent 744 653, Jan 21, 1944. Application F 89 213 Ib/49b dated Dec 14, 1940. Inventor: Ehrenberg. In German. 1.50 Drawings.

184-185 PB L 70434 SIEDEL, ALFONS (Inventor). Sewing needle with eye slot for threads. Ger. patent 744 654, Jan 22, 1944. Application S 141 440 VII/52a dated Jun 26, 1940. In German. 1.50 Drawing.

186-187 PB L 70434 SCHLÜTER, HANS UND ERNST KOMM. Method for the manufacture of sweets. Ger. patent 744 655, Jan 22, 1944. Application Sch 117 481 IVa/53f dated Jan 15, 1939. Inventor: Komm. In German. 1.50

188-189 PB L 70434 GÜNTHER, C.F.,& CO., HAMBURG. Method for the production of feed containing cellulose. Ger. patent 744 656, Jan 22, 1944. Application G 103 139 IVb/53g dated Mar 7, 1941. Inventors: Feaux de Lacroix and Dargats. In German. 1.50

190-191 PB L 70434 GÜNTHER, C.F.,& CO., HAMBURG. Manufacture of feed. Ger.

patent 744 657, Jan 22, 1944. Application G 103 634 IVb/53g dated Jun 6, 1941. Inventors: Feaux de Lacroix and Dargata. In German. 1.50

192-193 PB L 70434 CHEMISCHE FABRIK JOH. A. BENCKISER G.M.B.H., LUDWIGSHAFEN, RHEIN. Method for bleaching blood. Ger. patent 744 658, Jan 22, 1944. Application C 57 861 IVa/53i dated Dec 12, 1942. Inventors: Rudy and Gläser. In German. 1.50

194-196 PB L 70434 "SAROTTI" A.G., BERLIN. Method and device for producing engraved decorations on chocolate candy. Ger. patent 744 659, Oct 13, 1944. Application S 146 586 V/53 l dated Aug 16, 1941. Inventor: Engelhart. In German. 1.50
Drawings included.

197-199 PB L 70434 STEHR, ROBERT (Inventor). Separator for fibrous material particularly for paper pulp. Ger. patent 744 661, Jan 22, 1944. Application St 60 953 VII/55d dated Aug 2, 1941. In German. 1.50
Drawings.

200-201 PB L 70434 FELDMÜHLE PAPIER- UND ZELLSTOFF-WERKE A.G., BERLIN. Method of manufacturing a proper binding and smoothing agent for the filling substance of art paper and "chromo" paper. Ger. patent 744 662, Jan 22, 1944. Application F 91 543 VII/55f dated Apr 3, 1942. Inventors: Dittmar, Rudolf and others. In German. 1.50

202-203 PB L 70434 GEVAERT PHOTO-PRODUCTEN N.V., OUDE-GOD, ANTWERP, BELGIUM. Method for the production of colored photographic layers. Ger. patent 744 663, Jan 22, 1944. Ger. patent G 105 255 IVa/57b dated Apr 23, 1942. Inventors: Stevens, René and others. In German. 1.50

204-205 PB L 70434 KODAK A.G., BERLIN. Method of sensitizing silver halide emulsions. Ger. patent 744 664, Aug 8, 1944. Application K 156 544 IVa/57b dated Apr 22, 1938. Inventors: White and Keyes. In German. 1.50

206-208 PB L 70434 MESSERSCHMITT A.G., AUGSBURG. Airplane wings with fuel tanks, set in between the I-spars. Ger. patent 744 665, Jan 22, 1944. Application M 152 242 XI/62b dated Oct 26, 1941. Inventor: Messerschmitt. In German. 1.50
Drawing.

209-210 PB L 70434 JUNKERS FLUGZEUG-UND-MOTOREN-WERKE A.G., DESSAU. Barlike airplane part which is subjected to vibration. Ger. patent 744 666, Mar 16, 1944. Application J 74 214 XI/62b dated Feb 2, 1943. Inventor: Nissen. In German. 1.50
Drawings.

211-212 PB L 70434 HEINKEL, ERNST, FLUGZEUGWERKE G.M.B.H., SEESTADT-ROSTOCK. Mounting of weapons in the outer cover of an airplane gun turret. Ger. patent 744 667, Jan 22, 1944.
Application H 161 025 XI/62b dated Nov 23, 1939. Inventor: Brandt. In German. 1.50
Drawings.

213-215 PB L 70434 DORNIER-WERKE G.M.B.H., FRIEDRICHSHAFEN. Device for the brake flaps of airplanes. Ger. patent 744 668, Jan 22, 1944. Application D 87 877 XI/62b dated May 27, 1942. Inventor: Staufer. In German. 1.50
Drawing.

216-217 PB L 70434 PRANSCHKE, FRIEDA, GEB. LANGHEINRICH, DRESDEN and HUBERT WELLING, EMMERICH. Cart. Ger. patent 744 669, Jan 22, 1944. Application P 83 597 II/63b dated Dec 25, 1941. Inventor: Pranschke. In German. 1.50
Drawings.

218-219 PB L 70434 ANSCHÜTZ & CO., G.M.B.H., KIEL-NEUMÜHLEN-DIETRICHSDORF. Regulator, particularly for the automatic control of vehicles. Ger. patent 744 670, Jan 22, 1944. Application A 95 879 XI/65f-2 dated Jun 25, 1942. Inventor: Oppelt. In German. 1.50
Drawings.

220-221 PB L 70434 FABER-CASTELL, A.W., STEIN B. NÜRNBERG. Weight of ink-resistant material for the writing needle of fountain pens. Ger. patent 744 671, Jan 22, 1944. Application F 90 929 X/70b dated Dec 3, 1941. Inventor: Sattmann. In German. 1.50
Drawings.

222-223 PB L 70434 KRUPP, FRIED., GRUSONWERK A.G., MAGDEBURG-BUCKAU. Basket weaving machine. Ger. patent 744 672, Jan 22, 1944. Application K 159 677 VIII/73 dated Dec 31, 1940. Inventor: Wieghardt. In German. 1.50

224-225 PB L 70434 WINTERSHALL A.G., KASSEL. Method and device for electrostatic separation. Ger. patent 744 673, Jan 22, 1944. Application W 109 476 VIb/1b dated Aug 12, 1941. Inventors: Nestler and Birkenbach. In German. 1.50
Drawing.

226-227 PB L 70434 KÜRTH, RUDOLF (Inventor). Method for the flotation of minerals and other materials. Ger. patent 744 675, Jan 22, 1944. Application K 162 536 VIb/1c dated Oct 23, 1941. In German. 1.50

228-230 PB L 70434 JAECKEL, GEORG (Inventor). Reflecting surface for signs. Ger. patent 744 676, Jan 22, 1944. Application I 65 149 IIa/4b dated Jul 15, 1939. In German. 1.50
Drawings.

231-232 PB L 70434 PENKERT, MAX, TRAUTENAU UND BIOSYN-GESELLSCHAFT M.B.H., WEIMAR. Method for obtaining fungus mycelia from cellulose impurities. Ger. patent 744 677, Jan 24, 1944. Application P 81 642 IVa/6a dated Dec 6, 1940. Inventor: Penkert. In German. 1.50

233-234 PB L 70434 — ZELLSTOFFFABRIK WALDHOF, MANNHEIM-WALDHOF. Method of producing yeast and yeast-like fungi. Ger. patent 744 678, Jan 24, 1944. Application Z 26 688 IVa/6a dated Oct 19, 1941. Inventor: Claus. In German. 1.50

235-236 PB L 70434 — BÖHM & HAAS G.M.B.H., DARMSTADT. Method of producing stable dry amylase preparations from cereal malt. Ger. patent 744 680, Jan 24, 1944. Application R 112 877 IVa/6a dated May 7, 1942. Inventor: Wasmund. In German. 1.50

237-238 PB L 70434 — WEIGELWERK A.G., NEISSE-NEULAND. Purification method. Ger. patent 744 681, Jan 24, 1944. Application W 110 706 IVa/6b dated Mar 26, 1942. In German. 1.50

239-242 PB L 70434 — MERCK, E., CHEMISCHE FABRIK, DARMSTADT. Method and device for the continuous fermentation of fermenting liquids, low in sugar into alcohol. Ger. patent 744 682, Jan 24, 1944. Application M 147 361 IVa/6b dated Mar 22, 1940. Inventor: Keussler. In German. Drawing. 1.50

243-244 PB L 70434 — KALTWALZWERK U. PRÄZISIONSZICHEREI KRAFT & CO., G.M.B.H., HOHENLIMBURG. Method for cold rolling web iron of small dimensions. Ger. patent 744 683, Jan 22, 1944. Application B 177 612 Ib/7a dated Mar 6, 1937. Inventor: Wenske. In German. Drawings. 1.50

245-247 PB L 70434 — JOH. MORITZ RUMP, ALTENA, WESTF. Mechanism for winding up of steel and metal strip. Ger. patent 744 684, Jan 22, 1944. Application R 103 008 Ib/7b dated Aug 2, 1938. In German. Drawings. 1.50

248-249 PB L 70434 — ZAHN & CO., BERLIN. Method and device for spray drying. Ger. patent 744 685, Jan 28, 1944. Application Z 26 834 IVa/12a dated Jan 3, 1942. Inventor: D'Ans. In German. Drawing. 1.50

250-251 PB L 70434 — AUGESELLSCHAFT A.G., BERLIN. Filter for protection against inorganic hydrogen compounds of polyvalent nonmetals. Ger. patent 744 686, Jun 21, 1944. Application A 86 610 IVb/12c dated Apr 26, 1938. Inventor: Stiller. In German. 1.50

252-253 PB L 70434 — ALLGEMEINE ELECTRICITÄTS-GESELLSCHAFT, BERLIN. Device for separating ammonia by means of catalysts. Ger. patent 744 687, Jan 26, 1944. Application L 101 097 IVb/121 dated Jun 19, 1940. Inventor: Lohausen. In German. 1.50

254-255 PB L 70434 — I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Production of disodium arsenate. Ger. patent 744 688, Jan 24, 1944. Application I 66 964 IVb/121 dated May 1, 1940. Inventors: Beuther and Eck. In German. 1.50

256-257 PB L 70434 — DEUTSCHE GOLD- UND SILBER-SCHEIDE-ANSTALT VORMALS ROESSLER, FRANKFURT, MAIN. Method of producing molded bodies suitable for cyanidizing processes. Ger. patent 744 689, Jan 24, 1944. Application D 85 742 IVb/12k dated Aug 22, 1941. Inventor: Kloepfer. In German. 1.50

258-262 PB L 70434 — SIEMENS-SCHUCKERTWERKE A.G., BERLIN-SIEMENSSTADT. Feeding device for annealing furnaces. Ger. patent 744 691, Jan 22, 1944. Application S 142 074 VIa/18c dated Aug 25, 1940. Inventor: Eberwein. In German. 1.50

263-265 PB L 70434 — SCHALTBAU-GESELLSCHAFT M.B.H., MÜNCHEN. A conductor line tube for the electric wires in railway vehicles. Ger. patent 744 692, Jan 22, 1944. Application Sch 122 227 VIIId/20 1 dated Mar 22, 1941. Inventor: Hitzelsberger. In German. Drawings. 1.50

266-268 PB L 70434 — OPTA RADIO A.G., BERLIN-STEGLITZ. Signal transmitter with several rotating cam plates serving as a signal device, directly controlling a common transmitter contact. Ger. patent 744 693, Jan 22, 1944. Application L 103 997 VIIIa/21a-1 dated Apr 26, 1941. Inventor: Gutzke. In German. Drawings. 1.50

269-271 PB L 70434 — SIEMENS & HALSKE A.G., BERLIN-SIEMENSSTADT. Circuit arrangement for the reception of telegraphic signals over long cable lines, particularly ocean cables. Ger. patent 744 694, Jan 22, 1944. Application S 140 202 VIIIa/21a-1 dated Feb 21, 1940. Inventor: Fülling. In German. 1.50

272-274 PB L 70434 — SIEMENS & HALSKE A. G., BERLIN-WILMERSDORF. Arrangement for a telegraph receiver in which camshaft stops after one rotation even if no impulse occurs. Ger. patent 744 695, Jan 22, 1944. Application S 147 864 VIIIa/21a-1 dated Nov 29, 1941. Inventor: Wösteney. In German. Drawings. 1.50

275-277 PB L 70434 — OPTA RADIO A.G., BERLIN-STEGLITZ. Circuit for correcting the frequency response of a grid controlled tube. Ger. patent 744 697, Jun 10, 1944. Application R 105 092 VIIIa/21a-1 dated Apr 28, 1939. Inventors: Cherry and others. In German. Drawing. 1.50

278-279 PB L 70434 — TELEFUNKENGESELLSCHAFT FÜR DRAHTLOSE TELEGRAPHIE M.B.H., BERLIN-ZEHLENDORF. High frequency device, particularly a receiver. Ger. patent 744 698, May 5, 1944. Application T 51 630 VIIIa/21a-4 dated Jan 19, 1939. Inventor: Schröder. In German. Drawing. 1.50

280-281 PB L 70434 — BUSCH-JAEGER LÜDENSCHEIDER METALLWERKE A.G., LÜDENSCHEID. Rotary switch or spring operated roller switch with graphite lubrication.

Ger. patent 744 699, Jan 22, 1944. Application B 197 951 VIII/21c dated Apr 16, 1942. Inventor: Diller. In German. 1.50
Addition to patent 735 870. Drawings.

282-283 PB L 70434 WERNER, FRITZ, A.G., BERLIN-MARIENFELDE. Circuit for AC operated motors with DC braking action. Ger. patent 744 700, Nov 16, 1944. Application W 107 356 VIIId/21c dated Jun 13, 1940. Inventor: Schmidt. In German. 1.50
Drawings.

284-286 PB L 70434 ALLGEMEINE ELECTRICITÄTS-GESELLSCHAFT, BERLIN. Arrangement on self excited generators controlled by automatic regulators. Ger. patent 744 701, Mar 31, 1944. Application A 87 765 VIIId/21c dated Aug 11, 1938. Inventor: Thompson. In German. 1.50
Drawing.

287-289 PB L 70434 ALLGEMEINE ELECTRICITÄTS-GESELLSCHAFT, BERLIN. Automatic miniature switch. Ger. patent 744 702, Jan 24, 1944. Application L 102 207 VIIIb/21c dated Oct 27, 1940. Inventors: Schmidt and Fahrenbach. In German. 1.50
Drawings.

290-292 PB L 70434 "ELIN" UND SCHORCH-WERKE A.G., FÜR ELEKTRISCHE INDUSTRIE, VIENNA. Conductor for excess voltages. Ger. patent 744 703, Jan 24, 1944. Application E 56 089 VIIIb/21c dated May 22, 1942. Inventor: Manzinger, Hans. In German. 1.50
Drawings.

293-295 PB L 70434 "ELIN" UND SCHORCH-WERKE A.G., FÜR ELEKTRISCHE INDUSTRIE, VIENNA. Multiple spark gap. Ger. patent 744 704, Jan 24, 1944. Application E 56 390 VIIIb/21c dated Aug 25, 1942. Inventors: Kirschner and Thiel. In German. 1.50
Drawings.

296-299 PB L 70434 SIEMENS-SCHUCKERTWERKE A.G., BERLIN-SIEMENSSTADT. Valve type conductor for excess voltages. Ger. patent 744 705, Jan 24, 1944. Application S 136 987, dated May 6, 1939. Inventors: Slepian and Berkey. In German. 1.50
Drawings.

300-301 PB L 70434 ALLGEMEINE ELECTRICITÄTS-GESELLSCHAFT, BERLIN. Control installation for oil transformer. Ger. patent 744 706, Jan 24, 1944. Application L 96 543 VIIId/21d-3 dated Dec 13, 1938. Inventor: Wurl. In German. 1.50
Drawing.

302-304 PB L 70434 SIEMENS-SCHUCKERTWERKE A.G., BERLIN-SIEMENSSTADT. Control device for electrical machinery. Ger. patent 744 707, Jun 8, 1944. Application S 141 732 VIIId/21d-3 dated Jul 21, 1940. Inventor: Emerson. In German. 1.50
Drawings.

305-306 PB L 70434 VEREINIGTE TELEFON- & TELEGRAFEN-WERKE A.G., VIENNA. Method of producing a moisture proof seal for capacitors. Ger. patent 744 708, Nov 16, 1944. Application V 37 931 VIIIc/21g dated Aug 2, 1941. Inventor: Wuck. In German. 1.50

307-309 PB L 70434 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT, BERLIN. Cathode-ray tube for operation with high voltages. Ger. patent 744 709, Jan 24, 1944. Application L 102 640 VIIIc/21g dated Dec 7, 1940. Inventor: Katz. In German. 1.50
Drawings.

310-311 PB L 70434 SIEMENS-REINIGER-WERKE A.G., BERLIN. Safety device for the high-tension external anode of an X-ray tube. Ger. patent 744 710, Jul 21, 1944. Application S 135 795 VIIIc/21g dated Feb 8, 1939. In German. 1.50
Addition to patent 730 395. Drawing.

312-314 PB L 70434 FERNSEH G.M.B.H., BERLIN-ZEHLENDORF. Circuit for producing saw tooth oscillations. Ger. patent 744 711, Jan 24, 1944. Application F 905 524 VIIIc/21g dated Sep 14, 1941. Inventor: Buhs. In German. 1.50
Drawings.

315-316 PB L 70434 MASCHINEN- UND ARMATURENFABRIK VORM. C. LOUIS STRUBE A.G., MAGDEBURG-BUCKAU. Method for electrical butt welding of valve bodies. Ger. patent 744 712, Jan 24, 1944. Application M 150 773 VIIIc/21b dated May 9, 1941. Inventor: Wempe. In German. 1.50
Drawings.

317-318 PB L 70434 SCHLICKUM, J., & CO., HAMBURG. Method for producing saponified pastes of oxidation products of synthetic paraffin and ceresin. Ger. patent 744 713, Jan 24, 1944. Application Sch 121 861 IVc/22g dated Jan 25, 1941. Inventor: Lührs. In German. 1.50

319-320 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Method for the production of dry binding agents. Ger. patent 744 714, Jan 24, 1944. Application I 71 989 IVc/22h dated Apr 1, 1942. Inventor: Graf. In German. 1.50

321-322 PB L 70434 SPELLEKEN, H., NACHF. KOM. GES., WUPPERTAL-OBERBARMEN. Compressor with supply chamber openings. Ger. patent 744 715, Jan 24, 1944. Application S 149 173 Ia/27c dated Feb 28, 1942. Inventor: Orf. In German. 1.50
Drawings.

323-324 PB L 70434 WAGNER, KARL FRIEDRICH (Inventor). Melting furnace for pressure casting machines. Ger. patent 744 716, Jan 24, 1944. Application # 108 229 VIa/31c dated Dec 15, 1940. In German. 1.50
Drawings.

325-327 PB L 70434 APELT, KARL (Inventor). Conveying device for ingots. Ger. patent 744 717, Jan 24, 1944. Application A 94 740 VIa/31c dated Dec 31, 1941. In German. 1.50
Drawings.

328-329 PB L 70434 SCHMIDT, KARL, G.M.B.H., NECKARSULM. Method for annealing Al-alloys to

be hardened. Ger. patent 744 718, Jan 24, 1944. Application Sch 120 598 VIa/40d dated Jun 16, 1940. Inventor: Dullenkopf. In German. 1.50

330-332 PB L 70434 THEISSING, HANS and WERNER WAGENKNECHT. Measuring instrument for the direct indication of illumination colorings. Ger. patent 744 719, May 5, 1944. Application T 54 240 IIa/42h dated Sep 12, 1940. Inventor: Theissing. In German. Drawings. 1.50

333-335 PB L 70434 RHENANIA-OSSAG, MINERALÖLWERKE A.G., HAMBURG. Oil and material testing apparatus. Ger. patent 744 720, Sep 27, 1944. Application R 113 071 IXb/42 l dated May 28, 1942. Inventor: Hofmann. In German. Drawings. 1.50

336-337 PB L 70434 GEBR. BORCHERS A.G., GOSLAR. Insecticide. Ger. patent 744 721, Jan 25, 1944. Application B 198 735 IVa/45 l dated Jun 30, 1942. Inventors: Gerneck and Salaschek. In German. 1.50

338-339 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Diesel oil. Ger. patent 744 722, Jan 25, 1944. Application I 67 900 IVd/46a-6 dated Sep 24, 1940. Inventor: Christmann. In German. 1.50

340-341 PB L 70434 BUDNICK, ARNO (Inventor). Hob with finishing teeth. Ger. patent 744 724, Jan 24, 1944. Application B 199 154 Ib/49d dated Aug 6, 1942. In German. Drawing. 1.50

342-344 PB L 70434 WILD, HEINRICH (Inventor). Interchangeable cover for mail packages. Ger. patent 744 725, Jan 24, 1944. Application W 109 579 VII/54b dated Sep 7, 1941. In German. Drawings. 1.50

345-346 PB L 70434 HAAKE, ROBERT (Inventor). Method of manufacturing ink-resistant resin sized paper. Ger. patent 744 727, Apr 19, 1944. Application H 164 079 IVb/55c dated Dec 18, 1940. In German. 1.50

347-348 PB L 70434 KODAK A.G., BERLIN. Method for sensitizing silver halide emulsions. Ger. patent 744 728, Aug 8, 1944. Application K 156 545 IVa/57b dated Apr 21, 1938. Inventors: White and Keyes. In German. 1.50

349-351 PB L 70434 LIERG, FRIEDRICH (Inventor). Method for producing dyes of a true color and shade for the purpose of graphic color printing. Ger. patent 744 729, Jan 25, 1944. Application L 102 112 IVa/57d dated Feb 16, 1939. In German. 1.50

352-354 PB L 70434 WILHELSHÜTTE, EISEN- UND EMAILLIERWERKE A.G., SPROTTAU-WILHELSHÜTTE. Release for pump valves. Ger. patent 744 730, Jan 24, 1944. Application W 105 715 Ia/59a dated May 24, 1939. Inventor: Scholz. In German. Drawing. 1.50

355-357 PB L 70434 JUNKERS FLUGZEUG- UND-MOTORENWERKE A.G., DESSAU. Landing gear for airplanes. Ger. patent 744 731, Jan 24, 1944. Application J 69 221 XI/62b dated Mar 25, 1941. Inventor: Heinelt. In German. Drawings. 1.50

358-360 PB L 70434 JUNKERS FLUGZEUG-UND-MOTORENWERKE A.G., DESSAU. Landing gear for airplanes. Ger. patent 744 732, Jan 24, 1944. Application J 70 101 XI/62b dated Jul 24, 1941. Inventor: Heinelt. In German. Drawings. 1.50

361-362 PB L 70434 FLUGGERÄTE KLMA G.M.B.H., STUTTGART-BAD CANNSTADT. Shock absorber for airplanes. Ger. patent 744 733, Jan 24, 1944. Application F 92 395 XI/62b dated Sep 1, 1942. Inventor: Gabler. In German. Drawings. 1.50

363-365 PB L 70434 SCHOEN, HERBERT (Inventor). Adjustable telescopic strut, particularly for airplanes. Ger. patent 744 734, Jan 24, 1944. Application Sch 120 574 XI/62b dated Jun 13, 1940. In German. Drawings. 1.50

366-368 PB L 70434 GLOGGER, ADOLF, FAHRZEUGFABRIK, AUGSBURG. Coupling for connecting two trailers. Ger. patent 744 735, Jan 25, 1944. Application G 102 593 II/63c dated Nov 24, 1940. Inventor: Haberl. In German. Drawings. 1.50

369-371 PB L 70434 OPEL, ADAM, A.G., RÜSSELSHEIM, HESS. Shifting device, simultaneously effecting several controls or coupling procedures, particularly for the distributor gear of vehicles with four-wheel drive. Ger. patent 744 736, Jan 24, 1944. Application O 25 062 II/63c dated Jul 3, 1941. Inventor: Walterscheid. In German. Drawings. 1.50

372-374 PB L 70434 SCHWENKE, ROBERT (Inventor). Method for manufacturing a self-supported touring car body. Ger. patent 744 737, Jan 24, 1944. Application Sch 115 176 II/63c dated Mar 2, 1938. In German. Drawing. 1.50

375-378 PB L 70434 VARADI, JANOS (Inventor). Automatic steering of trolley cars or of several cars coupled together. Ger. patent 744 738, Nov 17, 1944. Application V 35 876 II/63c dated Apr 26, 1939. In German. Drawings. 1.50

379-380 PB L 70434 KLATTE, THEODOR, HUCHTING B. BREMEN. Heater for vehicles or airplanes. Ger. patent 744 739, Jan 24, 1944. Application K 162 599 II/63c dated Oct 29, 1941. Inventor: Bausch. In German. Drawing. 1.50

381-382 PB L 70434 BORGWARD, CARL F.W., INHABER DER FIRMA CARL F.W. BORGWARD, AUTOMOBIL- UND MOTORENWERKE, BREMEN.

Ventilating system for vehicles. Ger. patent 744 740, Jan 24, 1944. Application B 188 280 II/63c dated Aug 9, 1939. In German. Drawing. 1.50

383-384 PB L 70434 MIX, OTTO (Inventor). Air pump. Ger. patent 744 741, Jan 24, 1944. Application M 153 739 II/63e dated Jan 24, 1944. In German. Drawings. 1.50

385-389 PB L 70434 DEUTSCHE VEREINIGTE SCHUHMASCHINEN GESELLSCHAFT G.M.B.H., FRANKFURT, MAIN. Method and machinery for connecting shoe parts by glueing. Ger. patent 744 742, Jan 26, 1944. Application U 14 522 VII/71c dated Nov 22, 1938. Inventors: Pratt and Boothroyd. In German. Drawings. 1.50

390-391 PB L 70434 STORCH, ROBERT (Inventor). Stringing machine for tennis rackets with weighted action. Ger. patent 744 743, Jan 24, 1944. Application St 60 935 XI/77a dated Jul 24, 1941. In German. Drawing. 1.50

392-393 PB L 70434 HERM. UNGETHÜM NACHF. HEINZE & PFEIFFER, RIESA-PAUSITZ. Traction binding for skis. Ger. patent 744 744, Jan 24, 1944. Application U 15 210 XI/77b dated Nov 1, 1940. In German. Drawings. 1.50

394-395 PB L 70434 BOEHRINGER, C.H., SOHN, INGELHEIM, RHEIN. Method of eliminating stringiness in baked goods produced without leavening agents. Ger. patent 744 745, Jan 25, 1944. Application B 198 757 IVa/2c dated Jul 2, 1942. Inventors: Weyland and Wiebke. In German. Addition to patent 720 613. 1.50

396-397 PB L 70434 LUBIG, RICHARD and LUX, FRITZ (Inventors). Method of improving baking flour with yeast enzymes. Ger. patent 744 746, Jan 25, 1944. Application L 99 461 IVa/2c dated Nov 15, 1939. In German. 1.50

398-400 PB L 70434 FREY, ELEONORA (Inventor). Method and means of repairing the foot part of used stockings, socks, etc. Ger. patent 744 747, Nov 16, 1944. Application F 90 375 VII/3a dated Aug 12, 1941. In German. Drawings. 1.50

401-402 PB L 70434 FISCHER, FRITZ (Inventor). Method of producing "sour malts." Ger. patent 744 748, Jan 25, 1944. Application F 89 446 IVa/6a dated Jun 2, 1938. In German. 1.50

403-405 PB L 70434 SVENSKA JÄSTFABRIKS AKTIEBOLAGET, STOCKHOLM. Method and device for dehydrating yeast pastes. Ger. patent 744 749, Jan 24, 1944. Application S 149 037 IVa/VIa dated Feb 20, 1942. Inventor: Rosenquist. In German. Drawings. 1.50

406-408 PB L 70434 KRUPP, FRIED., GRUSONWERK A.G., MAGDEBURG-BUCKAU. Towing device for rolling mills. Ger. patent 744 750, Jan 24, 1944. Application K 158 272 Ib/7a dated Jul 30, 1940. Inventor: Rietz. In German. Drawings. 1.50

409-412 PB L 70434 GESELLSCHAFT FÜR CHEMISCHE INDUSTRIE, BASEL, BASEL, SWITZERLAND. Method for increasing the affinity of cellulose fibers for dyes containing sulfonic acid groups. Ger. patent 744 751, Jan 21, 1944. Application G 100 158 IVd/8m dated May 31, 1939. Inventors: Gränacher and others. In German. 1.50

413-415 PB L 70434 TOLLERT, HUGO (Inventor). Cutting device for paper, etc. Ger. patent 744 752, Jan 24, 1944. Application T 54 554 XII/11b dated Nov 17, 1940. In German. Drawings. 1.50

416-418 PB L 70434 SEIDEL, MAX (Inventor). Device for eliminating foam. Ger. patent 744 753, Jan 14, 1944. Application S 136 863 IVa/12a dated Apr 23, 1939. In German. Drawings. 1.50

419-420 PB L 70434 BOEHRINGER, C.H., SOHN CHEMISCHE FABRIK, INGELHEIM, RHEIN. Method for purifying lactic acid. Ger. patent 744 755, Jan 25, 1944. Application B 195 565 IVd/12o dated Sep 21, 1941. Inventors: Scheuing and Krauss. In German. 1.50

421-422 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Process for making N-(hydroxyethyl)-amino hydroxy benzenes and their nuclear substituted products. Ger. patent 744 757, Jan 25, 1944. Application I 71 997 IVc/12g dated Apr 12, 1942. Inventor: Richter. In German. 1.50

423-424 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Method of producing N-(hydroxy-ethyl)-amino hydroxy benzenes and their nuclear substituted products. Ger. patent 744 758, Jan 28, 1944. Application I 71 998 IVc/12g dated Apr 10, 1942. Inventor: Richter. In German. 1.50

425-428 PB L 70434 ASKANIA-WERKE A.G., BERLIN-FRIEDENAU. Device for selecting the smallest pressure existing in several areas, particularly for the control of the feeding pressure. Ger. patent 744 759, Nov 17, 1944. Application A 91 246 X/13b dated Apr 21, 1940. Inventor: Wünsch. In German. Drawings. 1.50

429-430 PB L 70434 DEUTSCHE GOLD- UND SILBER-SCHEIDE-ANSTALT VORMALS ROESSLER, FRANKFURT, MAIN. Hinged or movable shaft furnace cover. Ger. patent 744 760, Jan 24, 1944. Application D 89 076 VIa/18c dated Nov 1, 1942. Inventor: Weichselgärtner. In German. Drawing. 1.50

431-433 PB L 70434 SIEMENS-SCHUCKERTWERKE A.G., BERLIN-SIEMENSSTADT. Throw-over switch for switching procedures without

current, particularly for the operation and braking of electric vehicles. Ger. patent 744 761, Jan 24, 1944. Application S 140 171 VIIId/20 1 dated Feb 17, 1940. Inventor: Steghäfer. In German. 1.50
Drawings.

434-437 PB L 70434 — ALLGEMEINE ELECTRICITÄTS-GESELLSCHAFT, BERLIN. Rapid throw-over switch, particularly for the control of the generator output of internal combustion electrical vehicles. Ger. patent 744 762, Jan 24, 1944. Application L 97 995 VIIId/20 1 dated May 16, 1939. Inventor: Dörfer. In German. 1.50

438-440 PB L 70434 — FABBRICA ITALIANA MAGNETI MARELLI S.A., MILAN, ITALY. Arrangement for the tone control of radio receivers. Ger. patent 744 763, Jan 24, 1944. Application F 87 435 VIIIa/21a-2 dated Sep 19, 1939. In German. 1.50

441-443 PB L 70434 — SIEMENS-SCHUCKERTWERKE A.G., BERLIN-SIEMENSSTADT. Electric regulator with oscillator control. Ger. patent 744 764, Jul 29, 1944. Application S 139 348 VIIIb/21c dated Nov 28, 1939. Inventor: Exner. In German. 1.50
Drawings.

444-447 PB L 70434 — ALLGEMEINE ELEKTRIZITÄTS-GESELLSCHAFT, BERLIN. Safety device for electrical machinery. Ger. patent 744 765, Jan 24, 1944. Application L 103 429 VIIIb/21c dated Feb 27, 1943. Inventor: Kettner. In German. 1.50
Drawings.

448-449 PB L 70434 — ALLGEMEINE ELECTRICITÄTS-GESELLSCHAFT, BERLIN. Generator for electrical machinery. Ger. patent 744 766, Jan 24, 1944. Application L 100 599 VIIId/21d-1 dated Apr 16, 1940. Inventor: Prechtl. In German. 1.50
Drawings.

450-451 PB L 70434 — (Source missing). Mirror arrangement for the search and pursuit of airplanes. Ger. patent 744 767, n.d. Application dated Feb 5, 1943. Inventor: Deutsch. In German. 1.50
Drawings. (Frame 450 is missing).

452-453 PB L 70434 — FERNSEH G.M.B.H., BERLIN-ZEHLENDORF. Method of vaporizing metals. Ger. patent 744 768, Jan 25, 1944. Application F 85 344 VIIIc/21g dated Jul 17, 1938. Inventor: Hartmann. In German. 1.50

454-456 PB L 70434 — GEIGY, J.R., A.-G., BASEL, SWITZERLAND. Method of producing azo dye salts. Ger. patent 744 769, Jan 25, 1944. Application G 102 919 IVd/22a dated Jan 29, 1941. Inventors: Conzetti and Lehmann. In German. 1.50

457-459 PB L 70434 — GESELLSCHAFT FÜR CHEMISCHE INDUSTRIE, BASEL, BASEL, SWITZERLAND. Method of producing tetrakisazo dyes. Ger. patent 744 770, Jun 21, 1944. Application G 105 822 IVd/22a dated Jul 30, 1942. Inventors: Gyr and Gunst. In German. 1.50

460-461 PB L 70434 — GESELLSCHAFT FÜR CHEMISCHE INDUSTRIE, BASEL, BASEL, SWITZERLAND. Method of producing vat dyes. Ger. patent 744 771, Jan 25, 1944. Application G 100 330 IVd/22b dated Jul 1, 1939. Inventors: Hauser and Bommer. In German. 1.50

462-463 PB L 70434 — I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Method of producing acidic anthraquinone dyes. Ger. patent 744 772, Jan 25, 1944. Application I 64 765 IVd/22b dated Jun 6, 1939. Inventor: Heinrich. In German. 1.50

464-465 PB L 70434 — SPINNSTOFFWERK GLAUCHAU A.G., GLAUCHAU, SACHS. Method of producing a viscose fiber with increased spinning, felt and fulling properties and higher heat preserving capacity. Ger. patent 744 773, Jan 25, 1944. Application S 129 385 IVc/29b dated Nov 4, 1937. Inventors: Theissen and Stein. In German. 1.50

466-468 PB L 70434 — SCHLESISCHE SPIEGELGLAS-MANUFACTUR KARL THIELSCH, G.M.B.H., WALDENBURG, ALTWASSER. Method and device for the manufacture of plate glass. Ger. patent 744 775, Jan 25, 1944. Application Sch 121 170 VIb/32a dated Oct 15, 1940. In German. 1.50
Drawing.

469-471 PB L 70434 — SALVE, ERNST, AUGUSTENTHAL, KR. ALTENA. Strap winder for tapes of revolving shutters, drapes, etc. Ger. patent 744 776, Jan 25, 1944. Application S 138 610 X/34e dated Sep 14, 1939. In German. 1.50
Addition to patent 673 030.
Drawings.

472-474 PB L 70434 — I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Method for the production of adhesives. Ger. patent 744 777, Jan 25, 1944. Application I 65 111 IVc/39c dated Jul 12, 1939. Inventor: Scheuermann. In German. 1.50

475-476 PB L 70434 — DRÄGERWERK HEINR. U. BERNH. DRÄGER, LÜBECK. Method for protecting gold chloride solutions used in gas-testers against freezing. Ger. patent 744 778, Jan 25, 1944. Application D 77 084 IXb/42 1 dated Jan 20, 1938. In German. 1.50

477-479 PB L 70434 — ASKANIA-WERKE A.G., BERLIN-FRIEDENAU. Photographic method for determining the speed of fast moving objects, particularly airplanes. Ger. patent 744 780, Jan 25, 1944. Application A 89 486 IXb/42c dated May 7, 1939. Inventor: Schnittger. In German. 1.50
Drawings.

480-481 PB L 70434 — BERLINER PHYSIKALISCHE WERKSTÄTTEN G.M.B.H., BERLIN. Meter for determining the time of flight of projectiles. Ger. patent 744 781, Jan 25, 1944. Application B 196 097 IXb/42c dated Nov 13, 1941. Inventor: Blaszyk. In German. 1.50

482-484 PB L 70434 — "FAMO" FAHRZEUG- UND MOTOREN-WERKE G.M.B.H., BRESLAU.

Self-igniting air-compressing internal combustion engine. Ger. patent 744 782, Jul 29, 1944. Application F 91 398 Ia/46a-2 dated Mar 12, 1942. Inventor: Rauscher. In German. 1.50
Drawings.

485-487 PB L 70434 MASCHINENFABRIK AUGSBURG-NÜRNBERG A.G., AUGSBURG. Valve control for multi-cylinder internal combustion engines, particularly Diesel engines. Ger. patent 744 783, Nov 23, 1944. Application M 156 262 Ia/46b-1 dated Dec 19, 1942. Inventor: Seifert. In German. 1.50
Drawings.

488-490 PB L 70434 KLÖCKNER-HUMBOLDT-DEUTZ A.G., COLOGNE. Hydraulic fluid drive, particularly for valves and fuel pumps of internal combustion engines. Ger. patent 744 784, Jan 25, 1944. Application K 163 307 Ia/46b-1 dated Jan 10, 1942. Inventor: Emmerich. In German. 1.50
Drawings.

491-493 PB L 70434 KLÖCKNER-HUMBOLDT-DEUTZ A.G., COLOGNE. Fuel injection pump with pre-injection for internal combustion engines. Ger. patent 744 785, Jan 25, 1944. Application K 163 842 Ia/46c-2 dated Mar 3, 1942. Inventor: Müller. In German. 1.50
Drawing.

494-495 PB L 70434 MATRA-WERKE G.M.B.H., FRANKFURT, MAIN. Auxiliary device for testing of fuel injection pumps. Ger. patent 744 786, May 27, 1944. Application M 149 458 Ia/46c-2 dated Dec 19, 1940. In German. 1.50
Drawings.

496-497 PB L 70434 DORNIER-WERKE G.M.B.H., FRIEDRICHSHAFEN. Radiator consisting of exchangeable individual blocks. Ger. patent 744 787, Jan 25, 1944. Application D 87 860 Ia/46c-4 dated May 23, 1942. Inventor: Keitel. In German. 1.50

498-499 PB L 70434 MESSERSCHMITT A.G., AUGSBURG. Cooling installation for internal combustion engines of airplanes. Ger. patent 744 788, Jan 25, 1944. Application M 150 111 Ia/46c-4 dated Jun 27, 1940. Inventor: Caroli. In German. 1.50
Drawings.

500-501 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Method for preventing corrosion of metals by acids. Ger. patent 744 789, Jan 25, 1944. Application I 69 861 VIa/48d dated Jun 19, 1941. Inventors: Ebel and Sauer. In German. 1.50

502-503 PB L 70434 WEIL, VALENTIN and WEBER, KARL (Inventors). Lead solder, particularly for zinc and zinc alloys. Ger. patent 744 790, Jan 25, 1944. Application W 106 692 VIa/49h dated Dec 19, 1939. In German. 1.50

504-506 PB L 70434 MILDE, MARTIN (Inventor). Process for sterilizing food cans in an autoclave. Ger. patent 744 791, Jan 25, 1944. Application M 150 229 IVa/53c dated Mar 11, 1941. In German. 1.50
Drawing.

507-509 PB L 70434 MAHLKUCH, ERNST (Inventor). Device for treating grain with chemical fluids. Ger. patent 744 793, Jan 25, 1944. Application M 155 204 IVa/53c dated Sep 3, 1942. In German. 1.50
Drawings.

510-511 PB L 70434 ENGLHOFER, JOHANNES (Inventor). Manufacture of cough drops. Ger. patent 744 794, Jan 25, 1944. Application E 55 184 IVa/53f dated Aug 14, 1941. In German. 1.50
Drawing.

512-513 PB L 70434 PLENGER PUMPEN K.G., BERLIN. Arrangement for combining the stages of a multi-staged centrifugal pump. Ger. patent 744 795, Jan 25, 1944. Application P 81 710 Ia/59b dated Dec 14, 1940. Inventor: Dörr. In German. 1.50
Drawings.

514-518 PB L 70434 FICHTEL & SACHS A.G., SCHWEINFURT. Ordinary friction clutch or one to be switched on two shafts, particularly for vehicles. Ger. patent 744 796, Jan 26, 1944. Application F 90 384 II/63c dated Aug 12, 1941. Inventors: Binder and Gebhardt. In German. 1.50
Drawings.

519-521 PB L 70434 GAUNITZ, ARTHUR. Combined footgas and foot brake lever for vehicles. Ger. patent 744 797, Aug 28, 1944. Application G 105 108 II/63c dated Mar 28, 1942. Inventors: Gaunitz, Arthur and Gaunitz, Heinz. In German. 1.50

522-523 PB L 70434 BANDISCH, OTTO (Inventor). Sand spreader for vehicles. Ger. patent 744 798, Jan 25, 1944. Application B 196 302 II/63c dated Dec 3, 1941. In German. 1.50
Drawings.

524-525 PB L 70434 WINTERMAYER, EDUARD (Inventor). Pressure or suction ventilator for vehicles of any kind, particularly for powered vehicles. Ger. patent 744 799, Oct 27, 1944. Application W 108 528 II/63c dated Feb 14, 1941. In German. 1.50
Drawings.

526-528 PB L 70434 "AVOG" HOLLAND & MÜHLSCHLEGEL, BÜHLERTAL, BADEN. Double type window wiper, particularly for the wind shields of vehicles. Ger. patent 744 800, Jan 26, 1944. Application A 96 018 II/63c dated Jul 12, 1942. Inventor: Hansis. In German. 1.50
Drawings.

529-531 PB L 70434 ALLGEMEINE ELECTRICITÄTS-GESELLSCHAFT, BERLIN. Bridge circuit for the remote transmission of measured values. Ger. patent 744 801, Jan 26, 1944.

Application L 98 856 VIIIb/74b dated Aug 22, 1939. Inventor: Eggert. In German. 1.50
Drawings.

532-533 PB L 70434 EBERSPACHER, J., ESSLINGEN, NECKAR. Device for locating noises. Ger. patent 744 802, Jan 26, 1944. Application E 53 085 VIIIb/74d dated Oct 29, 1938. Inventor: Martin. In German. 1.50

534-536 PB L 70434 HONNEF, HERMANN (Inventor). Fan wheel with blade adjustment. Ger. patent 744 804, Jun 13, 1944. Application H 165 981 Ia/88c dated Aug 6, 1941. In German. 1.50
Drawings.

537-538 PB L 70434 METALLGESELLSCHAFT A.G., FRANKFURT, MAIN. Method for the electrostatic separation of mixtures. Ger. patent 744 805, Jan 26, 1944. Application M 150 534 VIb/1b dated Apr 10, 1941. Inventor: Heinrich. In German. 1.50

539-540 PB L 70434 FEDERSTAHL AKT. GES., KASSEL. Device for the setting of double headed rivets or round shaped parts, e.g., zipper links, to elastic or flexible material. Ger. patent 744 807, Apr 19, 1944. Application F 89 416 VII/3c dated Jan 26, 1941. Inventor: Mulka. In German. 1.50
Drawings.

541-542 PB L 70434 FACHUNTERGRUPPE ESSIGINDUSTRIE, BERLIN. Method for the manufacture of potato vinegar made of potato mash. Ger. patent 744 808, Jan 16, 1944. Application F 89 385 IVa/6e dated Jan 22, 1941. Inventor: Essen. In German. 1.50

543-544 PB L 70434 MECHANISCHE FASSFABRIK JOH. DREXLER & SOHN, MUNICH. Device for the impregnation of kegs by internal super-pressure. Ger. patent 744 809, Jan 26, 1944. Application Sch 121 717 IVa/6f dated Jan 7, 1941. Inventors: Tiefenthaler and Drexler, Ludwig. In German. 1.50
Drawing.

545-546 PB L 70434 HENKEL & CIE, G.M.B.H., DÜSSELDORF. Dispersable water soluble mixtures of capillary active compounds nondispersable in a pure state. Ger. patent 744 810, Jun 10, 1944. Application H 169 106 IVd/81 dated Aug 2, 1942. Inventor: Fernthaler. In German. 1.50

547-548 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Method for the preserving method of cleaning laundry, particularly white laundry. Ger. patent 744 811, Mar 31, 1944. Application I 72 590 IVd/81 dated Jun 27, 1942. Inventor: Amende. In German. 1.50

549-552 PB L 70434 GESELLSCHAFT FÜR CHEMISCHE INDUSTRIE, BASEL, BASEL, SWITZERLAND. Method for the production of azo dyes on fabrics of animal origin or cellulose fibers. Ger. patent 744 812, Nov 27, 1944. Application G 103 247 IVd/6m dated May 31, 1939. Inventors: Grünacher and Sallmann. In German. 1.50

553-555 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Wetting, emulsifying, cleaning, equalizing and dyeing agent. Ger. patent 744 814, Nov 17, 1944. Application I 64 134 IVd/8o dated Jan 18, 1938. Inventors: Orthner and others. In German. 1.50

556-558 PB L 70434 METALLGESELLSCHAFT A.G., FRANKFURT, MAIN. Distillation of high boiling fluids. Ger. patent 744 815, Jan 26, 1944. Application M 153 227 IVa/12a dated Feb 10, 1942. Inventor: Brücke. In German. 1.50
Drawings.

559-560 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Catalytic oxidation of ammonia. Ger. patent 744 816, Jan 28, 1944. Application I 72 115 IVb/121 dated Apr 25, 1942. Inventors: Friedel and Banthien. In German. 1.50

561-562 PB L 70434 MEYER, RUD. OTTO. Method of producing sodium carbonate from Glauber salt (sodium sulfate decahydrate). Ger. patent 744 817, Jan 26, 1944. Application M 150 280 IVb/12 1 dated Mar 15, 1941. Inventors: Behrens and Ebner. In German. 1.50

563-564 PB L 70434 MAUVE, EBERHARD and WITEK, LEO FRANTISEK (Inventors). Method of producing Al oxide from clay. Ger. patent 744 818, Jan 26, 1944. Application M 141 012 IVb/12m dated Mar 13, 1938. In German. 1.50

565-566 PB L 70434 METALLGESELLSCHAFT A.G., UND DEUTSCHE PULVERMETALLURGISCHE GESELLSCHAFT M.B.H., FRANKFURT, MAIN. Producing iron powder of a certain porosity, particularly for pressed objects. Ger. patent 744 820, Jan 26, 1944. Application M 147 521 IVb/12n dated Apr 10, 1940. Inventor: Siecke. In German. 1.50

567-568 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Method for the manufacture of pyridine. Ger. patent 744 821, Nov 16, 1944. Application I 69 440 IVc/12p dated Apr 25, 1944. Inventors: Teichmann and Ballant. In German. 1.50
Addition to patent 741 321.

569-572 PB L 70434 GESELLSCHAFT FÜR CHEMISCHE INDUSTRIE, BASEL, BASEL, SWITZERLAND. Method of producing new derivatives of the imidazole series. Ger. patent 744 822, Nov 28, 1944. Application G 101 699 IVc/12p dated May 11, 1940. Inventors: Grünacher and others. In German. 1.50

573-575 PB L 70434 METALLGESELLSCHAFT & A.G., FRANKFURT, MAIN. Method of obtaining phenols from phenol-containing oils, tars, etc. Ger. patent 744 823, Jan 26, 1944. Application M 147 671 IVc/12g dated Apr 24, 1940. Inventor: Herbert. In German. 1.50
Drawing.

576-577 PB L 70434 — I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Method of producing synthetic tanning agents. Ger. patent 744 824, Jan 26, 1944. Application I 62 446 IVc/12g dated Sep 14, 1938. Inventors: Voss and Selle. In German. 1.50

578-579 PB L 70434 — IMHOFF, KARL (Inventor). Method for the manufacture of fertilizer. Ger. patent 744 825, Jan 26, 1944. Application I 71 747 IVb/16 dated Mar 10, 1942. In German. 1.50

580-581 PB L 70434 — KÄNFLEIN, FRITZ (Inventor). Increasing the cylinder circulation at acetylene bottling plants. Ger. patent 744 826, Jan 26, 1944. Application K 167 027 Ia/17g dated Jan 5, 1943. In German. 1.50

582-583 PB L 70434 — GUTEHOFFNUNGSHÜTTE OBERHAUSEN A.G., OBERHAUSEN, RHEINL. Speed brake for supply carts. Ger. patent 744 827, Jan 26, 1944. Application G 106 341 II/20h dated Oct 30, 1942. Inventor: Braunfeld. In German. Drawings. 1.50

584-585 PB L 70434 — SIEMENS & HALSKE A.G., BERLIN-SIEMENSSTADT. Writing system for image point recorders. Ger. patent 744 828, Jan 26, 1944. Application S 142 522 VIIIa/21a-1 dated Oct 4, 1940. Inventors: Storch and others. In German. Drawings. 1.50

586-587 PB L 70434 — OPTA RADIO A.G., BERLIN-STEGLITZ. Method of televising films. Ger. patent 744 829, Jun 13, 1944. Application R 87 121 VIIIa/21a-1 dated Feb 1, 1933. In German. 1.50

588-589 PB L 70434 — KLANGFILM G.M.B.H., BERLIN. Diaphragm for pressure chamber loud-speakers. Ger. patent 744 830, Nov 21, 1944. Application K 158 210 VIIIa/21a-2 dated Jul 24, 1940. Inventor: Rösch. In German. Drawing. 1.50

590-591 PB L 70434 — KLANGFILM G.M.B.H., BERLIN. Stereophonic transmission with dynamic control. Ger. patent 744 831, Jan 26, 1944. Application K 161 817 VIIIa/21a-2 dated Jul 31, 1941. Inventor: Warncke. In German. Drawing. 1.50

592-593 PB L 70434 — VIERLING, OSKAR. Arrangement for producing sound delays and echoes. Ger. patent 744 832, Jan 26, 1944. Application V 37 637 VIIIa/21a-2 dated Apr 19, 1941. Inventor: Trautwein. In German. 1.50

594-596 PB L 70434 — TELEFONBAU UND NORMALZEIT G.M.B.H., FRANKFURT, MAIN. Circuit for the prevention of damages due to flash-back action. Ger. patent 744 833, Jan 26, 1944. Application T 56 130 VIIIa/21a-3 dated Sep 2, 1941. Inventor: Wirth. In German. Drawing. 1.50

597-598 PB L 70434 — ALLGEMEINE ELECTRICITÄTS-GESELLSCHAFT, BERLIN. Hydraulic pressure drive for high-tension switches. Ger. patent 744 834, Jan 26, 1944. Application L 103 951 VIIIb/21c dated Apr 17, 1941. Inventor: Warsinski. In German. Drawings. 1.50

599-600 PB L 70434 — HAGENUK HANSEATISCHE APPARATEBAU-GESELLSCHAFT NEUFELDT & KUHNKE G.M.B.H., KIEL. Arrangement for the remote control of objects according to pre-determined angles using a sensitive and non-sensitive transmission of a direct current. Ger. patent 744 835, Jun 21, 1944. Application H 166 289 VIIIb/21c dated Sep 14, 1941. Inventor: Rundshagen. In German. 1.50

601-604 PB L 70434 — ALLGEMEINE ELECTRICITÄTS-GESELLSCHAFT, BERLIN. Arrangement for limiting the angle of adjustment of electric motor driven adjustable objects. Ger. patent 744 836, Jan 26, 1944. Application L 100 488 VIIId/21c dated Apr 2, 1940. Inventors: Mitse and Mook. In German. Drawings. 1.50

605-606 PB L 70434 — BEDENS VON SCHARBERG, FRIEDRICH (Inventor). Electro-mechanical device for the immediate release of a switch or operating lever by means of a weak electrical impulse. Ger. patent 744 837, Jan 28, 1944. Application B 198 169 VIIIc/21g dated May 6, 1942. In German. Drawings. 1.50

607-608 PB L 70434 — JOHANN FROESCHEIS LYRA BLEISTIFT-FABRIK, NÜRNBERG. Method for the manufacture of copying pencil lead. Ger. patent 744 838, Apr 25, 1944. Application F 90 038 IVc/22g dated May 21, 1941. Inventor: Berger. In German. 1.50

609-610 PB L 70434 — LEUBE, MAX. Fire protective cement. Ger. patent 744 839, Jan 26, 1944. Application L 88 625 IVc/22g dated Aug 11, 1935. In German. 1.50

611-612 PB L 70434 — BEHRENDT, HERMANN, VETERSEN, HOLST., HERMANN GIEBEL and MAX TANSENT, HAMBURG. Method of producing resins from acid resins. Ger. patent 744 840, Jan 26, 1944. Application B 195 486 IVc/22h dated Sep 13, 1941. Inventors: Tansent and Behrendt. In German. 1.50

613-615 PB L 70434 — KOPPERS, HEINRICH, G.M.B.H., ESSEN. Automatic control for watergas installations, etc. Ger. patent 744 841, Jan 26, 1944. Application K 161 619 V/24e dated Mar 18, 1938. Inventor: Daniels. In German. Addition to patent 721 844. Drawing. 1.50

616-617 PB L 70434 — MARHOLT, KARL (Inventor). X-ray apparatus. Ger. patent 744 842, Jan 27, 1944. Application M 147 499 IIa/30a

dated Apr 10, 1940. In German. Drawings. 1.50

618-620 PB L 70434 FRITON, BRUNO (Inventor). Obstetrical forceps consisting of two parts with upward curved blades. Ger. patent 744 843, Jan 27, 1944. Application F 91 586 IXa/30a dated Apr 12, 1942. In German. Drawings. 1.50

621-622 PB L 70434 MACK, HEINRICH, MACHF., ULM, DONAU. Method for obtaining bee poison. Ger. patent 744 844, Jan 27, 1944. Application M 153 394 IVa/30h dated Feb 26, 1942. Inventors: Forster and Müller. In German. 1.50

623-624 PB L 70434 MAHLE KOMM. GES., STUTTGART-BAD CANNSTADT. Method for manufacturing light metal pistons. Ger. patent 744 845, Jan 25, 1944. Application M 155 203 VIa/31c dated Sep 3, 1942. Inventor: Kohler. In German. Drawing. 1.50

625-627 PB L 70434 MITTELDEUTSCHE STAHLWERKE A.G., RIESA. Sand casting mold. Ger. patent 744 846, Jan 27, 1944. Application M 150 177 VIa/31c dated Mar 7, 1941. Inventor: Singer. In German. Drawings. 1.50

628-629 PB L 70434 SORGENFREY, HERMANN (Inventor). Heatable bed. Ger. patent 744 847, Jan 27, 1944. Application S 144 130 X/34g dated Feb 23, 1941. In German. Drawings. 1.50

630-631 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Plasticizers and resins. Ger. patent 744 849, Jan 27, 1944. Application I 71 191 IVc/39b dated Dec 25, 1941. Inventors: Wegler and Cürten. In German. 1.50

632-634 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Method of producing multi-layer material. Ger. patent 744 850, Jan 27, 1944. Application I 68 963 IVc/39b dated Feb 22, 1941. Inventors: Quenelle and Turner. In German. 1.50

635-636 PB L 70434 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT, BERLIN. Acylated ricinoleic acid ester as a softener for polyvinyl halides. Ger. patent 744 851, Jan 24, 1944. Application A 86 625 IVc/39b dated Apr 27, 1938. Inventor: Agens. In German. 1.50

637-638 PB L 70434 CHEMIE PRODUKTE KOMM. GES., BERLIN-BRITZ. Permanent plastic mass for the corrosive protection of bandlike supports or in connection with fibers as a packing agent. Ger. patent 744 853, Jan 27, 1944. Application C 56 566 IVc/39b dated Jun 13, 1941. Inventor: Winter. In German. 1.50

639-640 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Method of manufacturing compound glass. Ger. patent 744 854, Jan 27, 1944. Application I 70 393 IVc/39b dated Sep 5, 1941. Inventor: Schultze. In German. 1.50

641-642 PB L 70434 ZEISS IKON A.G., DRESDEN. Velocimeter for projectiles based on the "Le Boulengé" principle. Ger. patent 744 855, Jan 27, 1944. Application Z 27 285 IXb/42o dated Aug 27, 1942. Inventor: Hintze. In German. Drawings. 1.50

643-644 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Diesel oil. Ger. patent 744 856, Jan 27, 1944. Application I 56 353 IVd/46a-6 dated Nov 13, 1936. Inventors: Pier and others. In German. 1.50

645-647 PB L 70434 JUNKERS FLUGZEUG-UND-MOTOREN-WERKE A.G., DESSAU. Air-cooled radiator. Ger. patent 744 857, Jan 27, 1944. Application I 63 976 Ia/46c-4 dated Mar 5, 1939. Inventor: Winterlin. In German. Drawings. 1.50

648-649 PB L 70434 GRZECA, WILLY (Inventor). C-shaped double hook for hooking onto two rope loops, chain rings, etc. Ger. patent 744 860, Jan 16, 1944. Application G 104 749 XII/47d dated Jan 24, 1941. In German. 1.50

650-651 PB L 70434 SIEMENS & HALSKE A.G., BERLIN-SIEMENSSTADT. Method for increasing the corrosion resistance of zinc coatings. Ger. patent 744 861, Jan 27, 1944. Application S 152 507 VIa/48d dated Oct 16, 1942. Inventors: Koch and Fenner. In German. 1.50

652-653 PB L 70434 SAROTTI A.G., BERLIN-TEMPELHOF. Method of manufacturing chocolate resistant to increased temperatures, particularly drying temperatures. Ger. patent 744 862, Jan 27, 1944. Application S 150 728 IVa/53f dated Jun 6, 1942. In German. 1.50

654-655 PB L 70434 HILTNER, PETER PAUL (Inventor). Method for the production of fish protein. Ger. patent 744 863, Jan 27, 1944. Application H 165 519 IVa/53i dated Jun 1, 1941. Inventors: Peters and others. In German. 1.50

656-657 PB L 70434 CHRISTOPF, OTTO (Inventor). Method of producing spices and extracts from fish meal, shell fish meal and marine animals. Ger. patent 744 864, Apr 19, 1944. Application C 57 471 IVa/53i dated Jul 3, 1942. In German. 1.50

658-660 PB L 70434 WINKLER, ALFRED and MAX DÜNNEBIER. Method and device for putting glue on paper, e.g., envelopes, etc. Ger. patent 744 865, Jan 27, 1944. Application W 109 797 VII/54b dated Oct 22, 1941. Inventor: Seyl. In German. Drawings. 1.50

661-662
PB L 70434
VERPACKUNGSBEDARF G.M.B.H., KREFELD. Brake for rotary mounted bodies, particularly for supply rolls on paper processing machinery. Ger. patent 744 866, Jan 31, 1944. Application V 38 532 VII/54b dated Feb 10, 1942. Inventor: Janssen. In German. Drawing. 1.50

663-664
PB L 70434
FIBROPLAST A.G., SCHAFFHAUSEN, SWITZERLAND. Method of manufacturing non-warping fibrous sheets. Ger. patent 744 867, Nov 17, 1944. Application F 92 253 VII/54e dated Aug 6, 1942. Inventor: Wilke. In German. 1.50

665-666
PB L 70434
INSTITUT FÜR ZELLSTOFF-UND PAPIER CHEMIE FORSCHUNGSSTELLE DES VIERJAHRESPLANES AN DER TECHNISCHEN HOCHSCHULE DARMSTADT and GEORG JAYME, DARMSTADT. Method of producing vegetable cellulose low in pentosan. Ger. patent 744 868, Jan 27, 1944. Application I 67 855 IVb/55b dated Mar 22, 1940. Inventors: Jayme and Sarten. In German. 1.50

667-668
PB L 70434
METALLGESELLSCHAFT A.G., FRANKFURT, MAIN. Method of preventing the incrustation of heating surfaces during the evaporation process of sulfite cellulose liquor. Ger. patent 744 869, Jan 27, 1944. Application M 144 523 IVb/55b dated Mar 14, 1939. Inventors: Müller and Scholz. In German. 1.50

669-671
PB L 70434
WOLFF, EUGEN (Inventor). Device for controlling the grinding roll pressure of paper pulp hollanders. Ger. patent 744 870, Jan 27, 1944. Application W 109 099 VII/55c dated May 25, 1941. In German. Drawings. 1.50

672
PB L 70434
FIRMA HENSCHEL, KASSEL. (Patent not on reel). Ger. patent 744 981. Application class 59b gr. 5/31, n.d. In German. Patent was returned to Patent Office, pursuant to a letter from the Henschel Co., dated March 14, 1944. 1.50

673-674
PB L 70434
MEILLER, F. X., MASCHINENFABRIK UND WAGENBAUANSTALT, MUNICH. Pivot axis for the tail and side gates of dump trucks. Ger. patent 744 873, Jan 28, 1944. Application M 156 765 II/63c dated Feb 12, 1943. Inventor: Falke. In German. Drawings. 1.50

675-677
PB L 70434
PORSCHE, H.C., K.-G., STUTTGART-ZUFFENHAUSEN. Spring suspension with torsion bar springs, especially for vehicles. Ger. patent 744 874, Nov 17, 1941. Application P 82 154 II/63c dated Mar 13, 1941. Inventor: Rabe. In German. Drawings. 1.50

678-680
PB L 70434
MIDDELKAMP, ALBERT, ZUTPHEN, HOLLAND. Control device for several electric lamps and other electrical devices of a vehicle. Ger. patent 744 875, Jan 28, 1944. Application M 147 803 II/63c dated May 12, 1940. Inventor: Middelkamp. In German. Drawings. 1.50

681-683
PB L 70434
GETEFO GESELLSCHAFT FÜR TECHNISCHEN FORTSCHRITT M.B.H., BERLIN. Elastic and shock absorbing mounting of instruments. Ger. patent 744 876, Feb 22, 1944. Application G 91 255 IIb/42d dated Sep 29, 1935. In German. Drawings. 1.50

684-685
PB L 70434
DEUTSCHE GOLD- UND SILBER-SCHEIDEANSTALT VORMALS ROESSLER, FRANKFURT, MAIN. Method for the preparation of acetone cyanohydrin. Ger. patent 744 877, Jan 28, 1944. Application D 70 633 IVd/12c dated Jun 29, 1935. Inventor: Schuls. In German. 1.50

686-687
PB L 70434
SANDOZ A.G., BASEL, SWITZERLAND. Method for the production of sulfonation products. Ger. patent 744 878, Jan 28, 1944. Application C 48 856 IVd/12c dated Feb 11, 1934. In German. Frame 687 is missing. Patent is not complete. 1.50

688-689
PB L 70434
NIEDERSCHLESISCHE BERGBAU A.G., NEU-WEISSSTEIN, POST WALDENBURG, SCHLES. Method for the recovery of pure toluene from a concentrated toluene fraction. Ger. patent 744 879, Jan 28, 1944. Application N 41 042 IVd/12r dated Aug 6, 1937. Inventor: Gieseler. In German. 1.50

690-692
PB L 70434
HERPEN, LA MONT KESSEL & CO., K.G., BERLIN. Automatic control of the fresh water supply in circulating steam producers. Ger. patent 744 880, Jan 28, 1944. Application H 95 753 X/13g dated Mar 12, 1936. Inventor: Hingst. In German. Drawings. Addition to patent 711 713. 1.50

693-695
PB L 70434
MENRATH, BERTHA AUGUSTE CHRISTIANE, GEB. HILDEBRANDT and others. Regulator for a turbo electric vehicle drive, particularly for ships. Ger. patent 744 881, Jan 28, 1944. Application M 142 950 Ia/14c dated Oct 2, 1938. Inventors: Menrath, Wilhelm and Abicht, Emil. In German. Drawings. 1.50

696-699
PB L 70434
WILLERS, HANS-BODO, BERLIN. Type printing telegraph receiver with dial mechanism that can be adjusted to operate independently of the receiving magnets. Ger. patent 744 882, Jan 28, 1944. Application C 50 223 VIIIa/21a-1 dated Feb 21, 1935. In German. Drawings. 1.50

700-701
PB L 70434
LORENZ, C., A.G., BERLIN-TEMPELHOF. Method for the electric trans-

mission of letters based on the image telegraph principle. Ger. patent 744 883, Jan 28, 1944. Application L 89 103 VIIIa/21a-1 dated Nov 1, 1935. In German. 1.50
Drawings.

702-704 PB L 70434 FERNSEH G.M.B.H., BERLIN-ZEHLENDORF. Device for the prevention of light dispersion occurring on thin layer type films for televising purposes. Ger. patent 744 884, Jan 28, 1944. Application F 82 817 VIIIc/21a-1 dated Mar 24, 1937. Inventors: Schubert and Zschau. In German. 1.50
Drawings.

705-706 PB L 70434 PHILIPS PATENTVERWALTUNG G.M.B.H., BERLIN. Circuit for preventing coupling used in carrier wave telegraphy or telephony. Ger. patent 744 885, Jan 28, 1944. Application N 40 074 VIIIa/21a-2 dated Nov 24, 1936. Inventor: Skillman. In German. 1.50
Drawing.

707-708 PB L 70434 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT, BERLIN. Unimpregnated single or multiconductor cable with pressure gas-filled, wrapped insulation. Ger. patent 744 886, Jan 28, 1944. Application A 65 878 VIIIb/21c dated May 4, 1932. Inventor: Kirch. In German. 1.50

709-711 PB L 70434 ALLGEMEINE ELECTRICITÄTS-GESELLSCHAFT, BERLIN. Oil relay for polyphase induction motors. Ger. patent 744 887, Jan 28, 1944. Application A 76 659 VIIIb/21c dated Jul 28, 1935. Inventors: Schoof and Cohn. In German. 1.50
Drawings.

712-713 PB L 70434 BOSCH, ROBERT, G.M.B.H., STUTTGART. Method for the manufacture of wound electrostatic capacitors using two dielectric strips each metallized on one side. Ger. patent 744 888, Jan 28, 1944. Application B 175 126 VIIIc/21g dated Aug 7, 1936. In German. 1.50
Drawings.

714-716 PB L 70434 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT, BERLIN. Electrode for secondary field emission. Ger. patent 744 889, Jan 28, 1944. Application A 83 560 VIIIc/21g dated Jul 9, 1937. Inventor: Mahl. In German. 1.50
Drawings.

717-719 PB L 70434 EDELEANU-GESELLSCHAFT M.B.H., BERLIN-SCHÖNEBERG. Method for decomposing raw oils, raw tars or their fractions. Ger. patent 744 890, Jan 28, 1944. Application E 53 141 IVd/23b dated Nov 18, 1939. Inventor: Fischer. In German. 1.50

720-721 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Method for the production of rayon, fibers and threads of viscose. Ger. patent 744 891, Jan 28, 1944. Application I 62 708 IVc/29b dated Oct 23, 1938. Inventors: Hubert and Hamann. In German. 1.50

722-724 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Spinning of superpolyamides. Ger. patent 744 892, Jan 28, 1944. Application P 78 810 IVc/29b dated Mar 10, 1939. Inventor: Bradshaw. In German. 1.50
Drawings.

725-726 PB L 70434 HOMANN, FRITZ. Elastic adhesive tape. Ger. patent 744 893, Jan 29, 1944. Application H 145 031 IIa/30d dated Sep 19, 1935. In German. 1.50
Drawings.

727-729 PB L 70434 MASCHINEN- UND WERKZEUGFABRIK KABEL VOGEL & SCHEMMAN A.G., HAGEN-KABEL. Bushing thrust device and tension arrangement for sand blasting machines. Ger. patent 744 894, Jan 29, 1944. Application M 148 911 VIa/31b dated Oct 20, 1940. Inventor: Dahlinger. In German. 1.50
Drawings.

730-732 PB L 70434 NEUE GLASINDUSTRIE-GESELLSCHAFT G.M.B.H., WEISSWASSER. Method and device for the manufacture of small glass bodies. Ger. patent 744 895, Jan 29, 1944. Application N 43 039 VIb/32a dated Mar 10, 1939. Inventor: Engels. In German. 1.50
Drawings.

733-735 PB L 70434 STAHL, R. Control device for elevators operating on AC. Ger. patent 744 896, Jan 29, 1944. Application St 51 228 XI/35a dated Aug 31, 1933. In German. 1.50
Drawing.

736-739 PB L 70434 SIEMENS-SCHUCKERTWERKE A.G., BERLIN-SIEMENSSTADT. Combined operating and safety brake for conveyors. Ger. patent 744 897, Jan 29, 1944. Application S 111 544 XI/35c dated Nov 2, 1933. Inventor: Mosch. In German. 1.50
Drawings.

740-742 PB L 70434 (Source missing). Heater for liquids. Ger. patent 744 898, Jan 29, 1944. Application B 172 616 V/36e dated Jan 23, 1936. In German. 1.50

743-746 PB L 70434 WURSTER & DIETZ, TÜBINGEN-DERENDINGEN. Nailing machine for bottoms and covers of different sized boxes. Ger. patent 744 899, Jan 29, 1944. Application W 92 290 XII/38d dated Jul 25, 1933. In German. 1.50
Drawings.

747-748 PB L 70434 METALLGESELLSCHAFT A.G., FRANKFURT, MAIN. Battery lead containing small quantities of bismuth and calcium. Ger. patent 744 900, Jan 29, 1944. Application M 139 920 VIa/40b dated Nov 26, 1937. Inventor: Göler von Ravensburg. In German. 1.50

749-750 PB L 70434 SIEMENS-SCHUCKERTWERKE A.G., BERLIN-SIEMENSSTADT. Fixed quantity consumption meter with control device. Ger. patent 744 901, Jan 29, 1944. Ap-

plication S 125 622 IXb/42d dated Jan 9, 1937. Inventor: Puschen. In German. 1.50

751-752 PB L 70434 DEUTSCHE VERSUCHSANSTALT FÜR LUFTFAHRT E.V., BERLIN-ADLERSHOF. Instrument for measuring length variations of statically and dynamically stressed construction parts. Ger. patent 744 902, Jan 29, 1944. Application D 755 441 IXb/42k dated Jun 19, 1937. Inventor: Clasen. In German. 1.50
Drawings.

753-755 PB L 70434 REICHERTER, GEORG. Hardness tester. Ger. patent 744 903, Jan 29, 1944. Application R 96 180 IXb/42k dated Apr 28, 1936. In German. 1.50
Drawings.

756-757 PB L 70434 STANDARDWERK WILHELM SCHULZE, HANNOVER. Spring attachment for a shaking device and return chute of thrashing machines. Ger. patent 744 904, Jan 29, 1944. Application St 61192 III/45e dated Oct 28, 1941. Inventor: Korte. In German. 1.50
Drawings.

758-759 PB L 70434 SORGE, WILHELM (Inventor). Adjustable wobble plate gear. Ger. patent 744 905, Jan 29, 1944. Application S 141 315 Ia/46a-10 dated Feb 21, 1940. In German. 1.50
Drawings.

760-761 PB L 70434 ZIMMERMANN & JANSEN G.M.B.H., DÜREN. Slide gate valve with two slide plates for hot gases, etc. Ger. patent 744 906, Jan 29, 1944. Application Z 25 950 XII/47g dated Aug 17, 1940. Inventor: Fink. In German. 1.50
Drawings.

762-764 PB L 70434 AUERGESELLSCHAFT A.G., BERLIN. Ventilator for air raid shelter. Ger. patent 744 907, Jan 29, 1944. Application D 66 701 V/61a dated Sep 26, 1933. In German. 1.50

765-767 PB L 70434 HEINKEL, ERNST, FLUGZEUGWERKE G.M.B.H., SEESTADT ROSTOCK. Cupola-like gun position in airplanes. Ger. patent 744 908, Jan 29, 1944. Application H 144 050 XI/62b dated Jun 20, 1935. Inventor: Leimberger. In German. 1.50
Drawings.

768-770 PB L 70434 DAIMLER-BENZ A.G., STUTTGART-UNTERTURKHEIM. Shifting device for five-speed gears of vehicles. Ger. patent 744 909, Jan 29, 1944. Application D 81 039 II/63c dated Aug 15, 1939. Inventor: Kümmrich. In German. 1.50
Drawings.

771-772 PB L 70434 AUTO UNION A.-G., CHEMNITZ. Drive for vehicles. Ger. patent 744 910, Jan 29, 1944. Application A 77 753 II/63c dated Nov 27, 1935. In German. 1.50
Drawings.

773-775 PB L 70434 AUTO UNION A.G., CHEMNITZ. Elastic two-point mounting for internal combustion engines set transversely to the longitudinal axis of the vehicle. Ger. patent 744 911, Jan 29, 1944. Application A 89 018 II/63c dated Feb 18, 1939. Inventor: Lieb. In German. 1.50
Drawings.

776-778 PB L 70434 WOLFF, OSKAR (Inventor). Fireproof box for valuables, documents, books, etc. Ger. patent 744 912, Jan 29, 1944. Application W 106 973 III/68e dated Mar 5, 1940. In German. 1.50
Drawing.

779-780 PB L 70434 SCHWAN-BLEISTIFT-FABRIK A.G., NÜRNBERG. Crayon with protective cover on the nonwriting end. Ger. patent 744 913, Jan 29, 1944. Application Sch 117 875 X/70a dated Mar 4, 1939. In German. 1.50
Drawings.

781-785 PB L 70434 APPARATEBAU-GESELLSCHAFT NEUMANN & BORM, BERLIN. Device for controlling and traversing guns, cranes, etc. Ger. patent 744 914, Jan 29, 1944. Application A 75 180 XI/72f dated Jan 30, 1935. Inventor: Carpzow. In German. 1.50
Drawings.

786-787 PB L 70434 GEBR. EICKHOFF MASCHINENFABRIK U. EISENGIESSEREI, BOCHUM. Conveyor roller mounting for trough-shaping conveyor belts. Ger. patent 744 915, Jan 29, 1944. Application E 50 230 XI/81e dated Sep 30, 1937. Inventors: Rodehüser and Hahn. In German. 1.50
Drawings.

788-789 PB L 70434 KAMM, OTTO (Inventor). Method of repairing and reinforcing of constructions as well as for strengthening and sealing of cracks in stone, etc. Ger. patent 744 916, Jan 29, 1944. Application K 154 702 V/84c dated Jun 10, 1939. In German. 1.50

790-792 PB L 70434 MASCHINENFABRIK BUCKAU R. WOLF A.G., MAGDEBURG. Hydraulic triangular support for dredges, etc. Ger. patent 744 917, Jan 31, 1944. Application M 141 097 V/84d dated Mar 24, 1938. Inventor: Seidemann. In German. 1.50
Drawings.

793-794 PB L 70434 REICH, KARL M. Impact tool. Ger. patent 744 918, Jan 31, 1944. Application R 117 917 XI/87b dated Jul 10, 1940. Inventor: Falliser. In German. 1.50
Drawings.

795-796 PB L 70434 PHRIX ARBEITSGEMEINSCHAFT, HIRSCHBERG, RIESENGEB. Nutrient fluid for the production of yeast. Ger. patent 744 919, Jan 31, 1944. Application P 82 397 IVa/6a dated Sep 15, 1940. Inventors: Dörr and others. In German. 1.50

797-798 PB L 70434 PHRIX ARBEITSGEMEINSCHAFT, HIRSCHBERG, RIESENGEB. Method for

improving color and taste as well as for increasing proteins in growing yeast. Ger. patent 744 920, Mar 21, 1944. Application P 83 326 IVa/6a dated Nov 9, 1941. Inventors: Pietz and Höfelmann. In German. 1.50

799-800 PB L 70434 KOMM, ERNST, DRESDEN and BIK-GULDENWERKE CHEMISCHE FABRIK A.G., BERLIN. Method of producing lactic acid by means of fermentation. Ger. patent 744 921, Jan 31, 1944. Application K 158 300 VIa/6b dated Jul 25, 1940. Inventor: Komm. In German. 1.50

801-804 PB L 70434 DEMAG A.G., DUISBURG. Rolling mill for the reduction of tubes. Ger. patent 744 922, Jan 31, 1944. Application D 82 276 Ib/7a dated Mar 9, 1940. Inventor: Barth and Wegner. In German. 1.50
Drawings.

805-807 PB L 70434 KOHLE- UND EISENFORSCHUNG G.M.B.H. UND DEUTSCHE RÖHRENWERKE A.G., DÜSSELDORF. Method for the manufacture of fire and corrosion stressed tubes with curved shapes. Ger. patent 744 923, Jan 31, 1944. Application K 155 203 Ib/7b dated Jul 29, 1939. Inventors: Nattermann and others. In German. 1.50
Drawings.

808-810 PB L 70434 HEMMER, L. PH., G.M.B.H., AACHEN. Method and mechanism for milling and washing of woven and unwoven textiles. Ger. patent 744 924, Jan 31, 1944. Application H 151 043 VII/8a dated Mar 17, 1937. Inventor: Sauer. In German. 1.50
Drawings.

811-814 PB L 70434 SPEIDEL, ROBERT. Device for ozonizing and purifying air. Ger. patent 744 925, Jan 31, 1944. Application S 123 884 IVb/12i dated Aug 18, 1936. In German. 1.50
Addition to patent 739 036.
Drawings.

815-816 PB L 70434 WITTEK, HERBERT. Method for the production of magnesium oxide. Ger. patent 744 926, Jan 31, 1944. Application D 75 512 IVb/12m dated Jun 15, 1937. In German. 1.50
Addition to patent 715 606.

817-819 PB L 70434 VOMAG VOGTLÄNDISCHE MASCHINEN-FABRIK A.G., PLAUEN, VOGTL. Register control device for rotary printing machines, particularly for such of the deep edge plate type. Ger. patent 744 927, Feb 22, 1944. Application V 36 357 XII/15d dated Dec 12, 1939. Inventor: Koch. In German. 1.50
Drawing.

820-823 PB L 70434 GESELLSCHAFT FÜR LINDES EIS-MASCHINEN A.G., HÖLLRIEGELS-KREUTH. Method for producing gas fractions by means of controllable cold chambers. Ger. patent 744 928, Jan 31, 1944. Application G 105 865 Ia/17g dated Aug 2, 1941. Inventor: Becker. In German. 1.50
Drawings.

824-827 PB L 70434 SIEMENS-SCHUCKERTWERKE A.G., BERLIN-SIEMENSSTADT. Staged resistance for the control of starting motors for vehicles and similar electric motors. Ger. patent 744 929, Jan 31, 1944. Application S 133 799 VIIId/20 1 dated Sep 9, 1938. Inventor: Steghöfer. In German. 1.50
Addition to patent 732 877.
Drawings.

828-830 PB L 70434 SIEMENS-SCHUCKERTWERKE A.G., BERLIN-SIEMENSSTADT. Staged resistance for controlling starting motors of vehicles and similar electric motors. Ger. patent 744 930, Jan 31, 1944. Application S 133 800 VIIId/20 1 dated Sep 9, 1938. Inventor: Steghöfer. In German. 1.50
Addition to patent 732 877.
Drawings.

831-835 PB L 70434 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT, BERLIN. Telecommunication installation with remote control. Ger. patent 744 931, Jan 31, 1944. Application A 76 698 VIIIb/21c dated Jul 31, 1935. Inventor: Zink. In German. 1.50
Drawings.

836-837 PB L 70434 "ELIN" UND SCHORCH-WERKE A.G., FÜR ELECTRISCHE INDUSTRIE, VIENNA. Circuit for the energy direction relay for the protection of three-phase systems fed from two sides. Ger. patent 744 932, Feb 22, 1944. Application E 51 351 dated Jul 9, 1938. Inventor: Schwarzmann. In German. 1.50

838-840 PB L 70434 BROWN, BOVERI & CIE A.G., MANNHEIM-KÄFERTAL. Device for achieving a constant alternating current voltage based on capacity and phase, from a source of highly fluctuating voltage. Ger. patent 744 933, Jan 31, 1944. Application B 186 814 VIIIb/21c dated Mar 26, 1939. Inventor: Fleischmann. In German. 1.50
Drawings.

841 PB L 70434 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT, BERLIN. Watt meter current direction relay for selective safety devices. Ger. patent 744 934, Jan 31, 1944. Application L 104 350 VIIIb/21c dated May 21, 1941. Inventors: Jahn and Gutmann. In German. 1.50

842-844 PB L 70434 HARTMANN & BRAUN A.G., FRANKFURT, MAIN. Phase meter. Ger. patent 744 935, Jan 31, 1944. Application H 160 405 VIIId/21e dated Aug 18, 1939. Inventor: Müller. In German. 1.50
Drawings.

845-846 PB L 70434 "SACHTLEBEN" A.G. FÜR BERGBAU UND CHEMISCHE INDUSTRIE, COLOGNE. Production of pure white zinc oxide from zinc liquors containing Mg and Ca. Ger. patent 744 937, Jan 31, 1944. Application S 129 086 IVb/22f dated Oct 10, 1937. Inventors: Lins and Grassmann. In German. 1.50

847-848 PB L 70434 AUTO UNION A.G., CHEMNITZ. Rotary compressor with double walled vanes. Ger. patent 744 936, Jan 31, 1944. Application A 93 041 Ia/27c dated Mar 6, 1941. In

German. Drawings. 1.50

849-852 PB L 70434 I.G. FARBENINDUSTRIE A.G., FRANKFURT, MAIN. Recovery of ammonia and heat from used cuprammonium rayon wash liquor. Ger. patent 744 939, Dec 6, 1944. Application I 69 664 IVc/29b dated May 23, 1941. Inventor: Haltmeier. In German. Drawings. 1.50

853-854 PB L 70434 MAYER, ERNEST (Inventor). Mold for the manufacture of cylinders or similar work pieces with cast fins. Ger. patent 744 940, Jan 31, 1944. Application M 149 239 VIa/31c dated Nov 26, 1939. In German. Drawings. 1.50

855-857 PB L 70434 SCHULLER, WERNER (Inventor). Method and device for the manufacture of very fine glass threads. Ger. patent 744 941, Feb 22, 1944. Application Sch 119 078 VIb/32a dated Feb 21, 1940. In German. Drawings. 1.50

858-860 PB L 70434 JUNKERS FLUGZEUG-UND-MOTORENWERKE A.G., DESSAU. Device for determining structure modifications of construction parts and work pieces due to fatigue bending stresses. Ger. patent 744 942, Feb 22, 1944. Application J 62 601 IXb/42k dated Oct 7, 1938. Inventor: Johnen. In German. Drawing. 1.50

861-863 PB L 70434 NEUBACH, ERNST, MASCHINEN-UND GERÄTEBAU, BERLIN-TEMPELHOF. Testing device based on the magnetic powder method. Ger. patent 744 943, Jan 31, 1944. Application H 161 944 IXb/42k dated Mar 31, 1940. Inventor: Schmid. In German. Drawings. 1.50

864-866 PB L 70434 KOCH & STERZEL A.G., DRESDEN. X-ray device for investigating raw materials, semifinished and finished goods. Ger. patent 744 944, Jan 31, 1944. Application K 154 515 IXb/42k dated May 23, 1939. Inventors: Leister and Reich. In German. Drawing. 1.50

867-868 PB L 70434 LUTZ, PHILIPP. Device for the rapid determination of calcium oxide and calcium hydroxide in mortar or lime. Ger. patent 744 945, Feb 22, 1944. Application L 97 199 IXb/42 l dated Feb 22, 1939. Inventor: Haege. In German. Drawing. 1.50

869-873 PB L 70434 DEUTSCHE HOLLERITH MASCHINEN GESELLSCHAFT M.B.H., BERLIN-LICHTERFELDE. Business machine controlled by punch cards. Ger. patent 744 946, Jan 31, 1944. Application I 63 953 IXb/43a dated Mar 1, 1939. Inventors: Fuller and Smart Beattie. In German. Drawings. 1.50

874-876 PB L 70434 SIEMENS & HALSKE A.G., BERLIN-SIEMENSSTADT. Sum punching mechanism for tabulating machines. Ger. patent 744 947, Jan 31, 1944. Application S 99 867 IXb/43a dated Jul 21, 1931. Inventor: Winkler. In German. Drawings. 1.50

877-886 PB L 70434 DEUTSCHE HOLLERITH MASCHINEN GESELLSCHAFT M.B.H., BERLIN-LICHTERFELDE. Accounts balancing machine controlled by punch cards. Ger. patent 744 948, Feb 22, 1944. Application T 40 633 IXb/43a dated May 1, 1932. In German. Drawings. 1.50

887-888 PB L 70434 ZAHNRADFABRIK FRIEDRICHSHAFEN A.G., FRIEDRICHSHAFEN. Axially adjustable jaw clutch for shafts. Ger. patent 744 949, Jan 31, 1944. Application Z 27 169 XII/47c dated Jul 7, 1942. Inventor: Ruf. In German. Addition to patent 738 515. Drawings. 1.50

889-890 PB L 70434 FOCKE-WULF FLUGZEUGBAU G.M.B.H., BREMEN. Device for cleaning work pieces e.g., a coil of pipe, with cleaning fluid. Ger. patent 744 950, Jan 31, 1944. Application F 91 035 VIa/48d dated Dec 20, 1941. Inventor: Hoppe. In German. Drawings. 1.50

891-893 PB L 70434 MALSCH, OTTO, (WILHELMS SOHN), STEINBACH, KR. MEININGEN. Rigid threading die head for fast running machinery. Ger. patent 744 951, Feb 22, 1944. Application M 145 578 Ib/49e dated Jul 15, 1939. Inventor: Malsch. In German. 1.50

894-896 PB L 70434 ZARGES, WALTHER (Inventor). Brazing of aluminum and aluminum alloys. Ger. patent 744 952, Jan 6, 1944. Application Z 24 152 Ib/49h dated Oct 6, 1937. In German. 1.50

897-898 PB L 70434 BOETTGER, AUGUST and MICHAEL KRONSCHNABL, MUNICH. Method of producing negatives or diapositives of correct tonal value. Ger. patent 744 953, Feb 22, 1944. Application B 181 518 IVa/57d dated Jan 20, 1938. Inventors: Kronschnabl, Michael and Johann. In German. 1.50

899-901 PB L 70434 HEINOLD, WILLY (Inventor). Four-chamber domed piston operated pump. Ger. patent 744 954, Feb 22, 1944. Application H 161 359 Ia/59c dated Jan 16, 1940. In German. 1.50

902-903 PB L 70434 DEUTSCHE BERGIN-A.G., FÜR HOLZ-HYDROLYSE, MANNHEIM RHEINAU. Method of preparing a wood sugar solution for the production of yeast by means of concentrated hydrochloric acid. Ger. patent 744 955, Jan 31, 1944. Application H 155 825 IVa/6a dated May 17, 1938. Inventors: Koch, Friedrich and Hugo. In German. 1.50

904-906 PB L 70434 RÖTZEL, CHRISTIAN. Rolling mill with roller sets arranged

side by side, particularly for rolling of thin material. Ger. patent 744 956, Jan 31, 1944. Application R 95 724 Ib/7a dated Mar 6, 1936. In German. Drawings. 1.50

907-909 PB L 70434 GESELLSCHAFT FÜR CHEMISCHE INDUSTRIE BASEL, BASEL, SWITZERLAND. Improving light proof colorings on cellulose fibers. Ger. patent 744 957, Feb 21, 1944. Application G 101 737 IVd/8m dated May 19, 1940. Inventors: Grünacher and others. In German. 1.50

910-911 PB L 70434 OTTO, C., & COMP. G.M.B.H., BOCHUM. Burner and sliding feed device for the regulated fuel charge in horizontal heating flues of chamber furnaces. Ger. patent 744 958, Feb 21, 1944. Application O 25 116 VIb/10a dated Aug 23, 1941. Inventor: Schuchert. In German. 1.50

912-913 PB L 70434 GENEFF, CHRISTO N. Method of producing 3-alkoxy-4-hydroxybenzaldehydes. Ger. patent 744 959, Feb 21, 1944. Application G 90 127 IVd/12c dated Mar 30, 1935. In German. 1.50

914-915 PB L 70434 VEREINIGTE EISENBAHN-SIGNALWERKE G.M.B.H., BERLIN-SIEMENSSTADT. Device for railway safety installations, especially for automatic signal blocks having three types of signals. Ger. patent 744 960, Feb 21, 1944. Application V 34 412 II/20i dated Dec 19, 1937. Inventor: Rehschuh. In German. Drawings. 1.50

916-919 PB L 70434 SIEMENS & HALSKE A.G., BERLIN-SIEMENSSTADT. Circuit arrangement for telephone installations with double dial system. Ger. patent 744 961, Feb 21, 1944. Application S 114 437 VIIIa/21a-3 dated Jun 23, 1934. Inventor: Pfaff. In German. 1.50

920-921 PB L 70434 PINTSCH, JULIUS, KOM. GES., BERLIN. Switching device for relay with delayed action obtained by use of a capacitor. Ger. patent 744 962, Feb 21, 1944. Application P 78 515 VIIIb/21c dated Jan 14, 1939. In German. Drawing. 1.50

922-924 PB L 70434 SIEMENS-SCHUCKERTWERKE A.G., BERLIN-SIEMENSSTADT. Control device for ship propulsion. Ger. patent 744 963, Feb 21, 1944. Application S 114 421 VIIIb/21c dated Jun 21, 1934. Inventor: Deutschmann. In German. Drawings. 1.50

925-927 PB L 70434 SIEMENS-SCHUCKERTWERKE A.G., BERLIN-SIEMENSSTADT. Arrangement for power limitation for electrical apparatus of several groups of consumers. Ger. patent 744 964, Feb 21, 1944. Application S 134 530 VIIId/21c dated Nov 8, 1938. Inventor: Giehl. In German. Drawing. 1.50

928-930 PB L 70434 LIST, HEINRICH. Electromagnetic vibrating armature motor. Ger. patent 744 965, Feb 22, 1944. Application L 87 132 VIIId/21d-1 dated Dec 13, 1934. In German. Drawings. 1.50

931-933 PB L 70434 MASCHINENFABRIK OERLIKON, ZÜRICH-OERLIKON, SWITZERLAND. Voltage regulating devices for staged transformers. Ger. patent 744 966, Feb 21, 1944. Application M 136 651 VIIId/21d-2 dated Dec 18, 1936. Inventor: Ritzler. In German. Drawing. 1.5[illegible]

934-936 PB L 70434 BROWN, A.G., BOVERI & CIE, BADEN, SWITZERLAND. Thrust transformer. Ger. patent 744 967, Feb 21, 1944. Application A 80 959 VIIId/21d-2 dated Nov 4, 1936. Inventor: Meyerhaus. In German. Drawings. 1.50

937-939 PB L 70434 SIEMENS-SCHUCKERTWERKE A.G., BERLIN-SIEMENSSTADT. Metallic vapor rectifier, particularly mercury vapor rectifier with a divided chamber from the cathode for collecting the metallic condensate. Ger. patent 744 968, Feb 22, 1944. Application S 124 373 VIIIc/21g dated Sep 29, 1936. In German. Drawings. 1.50

940-941 PB L 70434 MIEBACH, HUGO. Automatic electrically operated butt welder with hydraulic drive. Ger. patent 744 969, Feb 21, 1944. Application M 141 414 VIIIc/21h dated Apr 23, 1938. In German. Drawing. Addition to patent 683 019. 1.50

942-943 PB L 70434 PINTSCH, JULIUS, KOM.-GES., BERLIN. Gas generator for gasifying of decayed and lumpy pieces of fuel. Ger. patent 744 970, Feb 21, 1944. Application P 80 810 VIb/26a dated May 23, 1940. Inventor: Domann. In German. Drawing. 1.50

944-945 PB L 70434 BERGWERKSVERBAND ZUR VERWERTUNG VON SCHUTZRECHTEN DER KOHLENTECHNIK G.M.B.H., DORTMUND-EVING. Method for driving off of hydrocyanic acid from coke-oven gas. Ger. patent 744 971, Feb 21, 1944. Application B 189 204 IVb/26d dated Nov 25, 1939. Inventors: Klempt and Umbach. In German. 1.50

946-948 PB L 70434 ZIEPS, PAUL. Mold for dentures. Ger. patent 744 972, Feb 22, 1944. Application Z 20 226 IIa/30b dated Jun 5, 1932. In German. Drawings. 1.50

949-951 PB L 70434 GLAS-WOLLE KOMM.-GES., W. SCHULLER & CIE, HASELBACH, KR. SONNEBERG. Device for producing glass fibers from glass rods. Ger. patent 744 973, Feb 21, 1944. Application G 98 878 VIb/32a dated Nov 3, 1938. Inventor: Schuller. In German. Drawings. 1.50

952-954 PB L 70434 DOERING, ULRICH W. Method for recording of optical, acoustical or electrical processes by means of polarization. Ger. patent 744 974, Feb 21, 1944. Application 42g Z 131. 30 dated Feb 19, 1930. In German. 1.50

REGISTER OF PATENTS AVAILABLE FOR LICENSING OR SALE

Information on the following patents can be obtained from the U. S. Patent Office, Washington 25, D. C.

The "Groups" appearing after the patent abstracts are based on the Standard Industrial Classification Manual, Vol. 1, Manufacturing Industries, Executive Office of the President, Bureau of the Budget.

Official Gazette, January 20, 1948.

PAT. 2,326,199. Double action safety switch. Patented Aug. 10, 1943. Reg. No. 9,021.

PAT. 2,428,196. Circuit control system. Patented Sep 30, 1947. Reg. No. 9,022.

These two patents provide a control system for an electric circuit, particularly a motor vehicle circuit. The system will function to automatically protect the electrical equipment in the event of a short circuit, excessive generator voltage, blown-out fuse, etc., and at the same time insofar as possible maintain a maximum amount of electrical equipment in operation. In the system two fuses connect the generator respectively with the battery and load. A magnet-operated circuit breaker with two pairs of contacts has a coil connected across the outside terminals of the fuses and a second coil connected across the terminals of the generator. One pair of contacts is connected in series with the load to break the circuit through the load and the other pair is connected in series with the field to break the circuit through the field of the generator. The circuit breaker is constructed and arranged to break the circuit through the load before the circuit through the field is broken. (Co-owner) J. H. Bretthauer, 2754 Mickle Ave., Bronx, N. Y. Groups 36--19; 38--31.

PAT. 2,146,640. Dispensing device. Patented Feb 7, 1939.
A device for holding a supply of cylindrical objects, such as toothpicks, cigarettes, and pencils, and dispensing one article at a time. The dispenser is actuated by depressing any one of a plurality of vertical rods. Lower ends of the rods are pivotally connected to opposite sides of a bottom plate, which is pivotally supported at its center. This plate is connected to an upper slotted dispensing plate by a pair of upwardly extending opposed arms. When a rod is depressed, the bottom plate will pivot downwardly to cause the arms to slide the slotted plate horizontally over an opening permitting an article to drop from the slot into a finger recess in the side of the dispenser. The dispenser may be adapted for coin control if desired. (Co-owners) Vincenzo Mancini and John J. Micele. Address correspondence to Joseph F. Padlon, 120 Broadway, New York 5, N. Y. Groups 33--73; 35--73. Reg. No. 9,023.

PAT. 2,232,250. Spigot. Patented Feb 18, 1941.
Spigot designed for use with a gage is adapted to be connected to a tank or the like in which the contents are subject to inspection. The spigot has a main passageway and a bypass controlled by an intermediate hollow rotatable valve member which is divided into two chambers with ports in each chamber. A gage communicates with one of the chambers. A lateral handle for rotating the valve member has an opening adapted to register with either of two openings in a lateral flange on the body of the spigot so that the spigot may be locked with a padlock and sealed when the handle is in either of two positions. When locked in one position liquid will flow into the gage but there is no flow through the spout. In the other locked position there is no flow into the gage or out of the spout. When the handle is turned to another position liquid in the gage will drain into the spout, thereby emptying the gage without removing it. When the spigot is locked and sealed it is rendered tamperproof by a cooperating tongue and groove which prevents axial displacement of the hollow valve member. (Co-owners) Vincenzo Mancini and John J. Micele. Address correspondence to Joseph F. Padlon, 120 Broadway, New York 5, N. Y. Groups 25--99; 31--61. Reg. No. 9,024.

PAT. 2,203,175. Piston expanding tool. Patented Jun 4, 1940.
A tool for expanding and reconditioning worn pistons. An expander plate has pivotally mounted expansible pairs of links with obliquely arranged cam faces. The plate carries piston expanding bars arranged in pairs one above another. Threaded adjusting elements are arranged in a stem provided with an operating handle and selectively operate the piston expanding links and bars to engage the interior wall of the piston skirt at different points. The links straddle the wrist pin when the tool is locked in position in the piston during the expanding process. (Owner) Sheffield F. Oliver, 436 Linden Ave., Auburn, Calif. Groups 35--43; 36--41. Reg. No. 9,025.

PAT. 2,427,807. Sitz bath. Patented Sep 23, 1947.
A portable sitz bath. An ovate basin is supported substantially flush with top of a toilet seat by laterally extended wings. Spillways are provided in front and back portions of the rim to prevent overflowing. (Owner) Sheffield F. Oliver, 436 Linden Ave., Auburn, Calif. Groups 25--99; 34--41--99. Reg. No. 9,026.

PAT. 2,429,167. Cigarette holder. Patented Oct 14, 1947.
Holder for attaching to an ash tray, designed to permit a lighted cigar or cigarette to continue to burn but to prevent it from falling from the holder. A cigarette-supporting frame has a longitudinal rotatable bar which carries a plurality of counter-weighted upwardly curved fingers bent inwardly at their ends. A cigarette is supported at a number of spaced points when placed on the holder. The curved fingers under the influence of a counterweight are permitted to pivot upwardly so that their bent ends will overlie and lightly engage the upper side of the cigarette. The counterweight is lifted upwardly to pivot the fingers downwardly to permit a cigarette to be placed on or removed from the holder. (Owner) Paul C. Overmire, c/o Law Offices, J. H. Trabucco, 550 Russ Bldg., San Francisco 4, Calif. Group 39--96. Reg. No. 9,027.

PAT. 2,420,403. Electrodeposition of iron. Patented May 13, 1947.
This patent provides an electrolytic bath by means of which fine-grained iron deposits may be obtained by passing an electric current through a ferrous chloride solution in which manganous chloride or manganous sulphate has been added as a catalytic refining agent. The catalytic agent comprises at least one-tenth and not more than 20 grams per liter to a bath containing about 300 grams of ferrous chloride. The temperature of the bath is maintained between 160-220° F.; the pH value between 1 and 3. Inventor states the deposit obtained is smooth, strong, and ductile and does not require the later heat treatment necessary with previous processes. (Owner) The Champion Paper and Fibre Co., Hamilton, Ohio. Groups 28--88; 33; 34--72. Reg. No. 9,028.

PAT. 2,428,826. Coil and support construction. Patented Oct 14, 1947.
An electric coil support or bobbin for small coils with rectangular core sections, such as used in microphones. The bobbin is formed of interlocking insulating parts stamped from flat stock. Slots are so placed that when

assembled, the parts lock in place, being rigidly held after wire has been wound on the bobbin to form a coil. Miniature coils may be constructed with great uniformity, a result not always possible with molded bobbins. (Owner) Shure Brothers, Inc., 225 West Huron St., Chicago 10, Ill. Group 36--61. Reg. No. 9,029.

PAT. 2,043,284. Production of chlorine dioxide. Patented Jun 9, 1936.
This patent refers to a convenient and economical method of producing chlorine dioxide. Chlorine dioxide is obtained by the reaction of chlorine gas passed through a watery solution of sodium chlorite. The chlorine supplied to the reaction is diluted with air or nitrogen so that the chlorine dioxide obtained is in a substantially dilute form which may be used in such operations as the bleaching of flour, etc. (Owner) The Mathieson Alkali Works, Inc., 60 East 42nd St., New York 17, N. Y. Group 28--89. Reg. No. 9,030.

PAT. 2,428,994. Sled attachment for baby carriages. Patented Oct 14, 1947.
Standard four-wheel baby carriage is equipped with a pair of sleigh runners which may be retracted or extended so that the carriage may be wheeled in the usual way or operated as a sleigh. Each runner is pivoted to the lower ends of a pair of spaced vertical brace arms with the top of the arms pivoted to the axles of the carriage. The ends of the runners are connected by a front and rear cross rod. An inverted U-shaped auxiliary handle has its lower ends pivoted to the rear cross rod. The auxiliary handle is pulled upward to retract the runners and pushed downward to extend them. A pair of pins near the top of the auxiliary handle are adapted to fit into holes in the carriage handle to hold the runners in either position. (Owner) Jesse J. Rogers, 432 1/2 East Second St., Duluth, Minn. Group 39--43. Reg. No. 9,031.

PAT. 2,412,831. Pendulum vertical angle measuring instrument. Patented Dec 17, 1946.
An observation instrument for determining the altitude angle of a celestial body by reference to a perpendicular established by a gravitational pendulum. It is substantially similar to a sextant, octant, or quadrant. The instrument includes a frame comprising an arc bar having degrees marked thereon, and a handle; a telescope adjustably supported on the frame; a gravitational pendulum pivoted to the frame for establishing a perpendicular; and signal means controlled by relative angular relation of the pendulum and frame for indicating the proper horizontal position of the frame relative to the perpendicular established by the pendulum whereby the angle indicated on the arc will be the observed altitude of the celestial body at the observer's height of eye. The celestial body is observed directly in the eyepiece rather than in an index or horizon mirror. Colored glass filters are mounted along the body of the telescope, each having an operating knob. (Owner) Roy A. Owens, 3212 Springview Ave., Dallas 16, Tex. Group 39--13. Reg. No. 9,032.

PAT. 2,428,188. Lever plow. Patented Sep 30, 1947.
A hand-operated lever plow has an adjustable ground contacting wheel at front end of frame rotatably mounted on a stub-shaft. The forward movement is accomplished by working the handle bars up and down. An adjustable stop between the handles penetrates the ground to give anchorage while plowshare is forced through the ground. The leverage of the plow may be adjusted so that the plowshare can be moved varying distances with the same amount of movement of the handles. It may also be adjusted to suit the strength of the operator. (Owner) Joseph Williams, 217 Milbrea Ave., Santa Rosa, Calif. Group 35--22. Reg. No. 9,033.

PAT. 2,405,690. Game register. Patented Aug 13, 1946.
This device, which may be designed to resemble a watch, is used to register and indicate the score of the respective sides during a tennis game as well as the number of games won by each. Two pairs of dials are adapted to be individually rotated by turning a common stem in desired direction to expose game-indicating letters and numerals on the dials through openings in the face of the device. One pair of dials may be operated with the stem in its normal position. After completion of a game the stem is pulled outwardly to permit springs to return this pair of dials to their starting position. While the stem is in its outward position, the second pair of dials may be operated. Thumb pieces on opposite sides of the device may be depressed to reset either of the first pair of dials when this becomes necessary during a game. (Owner) Arthur W. Dew, 1900 West Broad St., Richmond 20, Va. Groups 25--65; 39--49. Reg. No. 9,034.

PAT. 2,429,014. Auto jack. Patented Oct 14, 1947.
This invention relates to lifting devices for use in connection with vehicles and like loads. The principle of operation resides in a novel pneumatic feature produced by chemical reaction. The jack is provided with a liquid-retaining cavity having valve structure associated therewith to permit portions of liquid to be fed to a gas chamber in the body of the jack, the body also being provided with an opening to permit introducing thereinto a chemical cartridge which in its reaction with the liquid will create sufficient gas pressure to lift a load supported on the jack. A second feature of the invention is the gradual lowering of the raised load by slow exhaust of the generated gas; or by connection of the exhaust through a hose the exhausted gas may be utilized to inflate the pneumatic tires of the vehicles. The device may also be used to inflate tires independently of its use to raise or lower vehicles. (Owner) Robert C. Christopher, 2132 North Campbell Ave., Chicago, Ill. Group 33--52. Reg. No. 9,035.

PAT. 1,962,818. Sun shield for the nose. Patented Jun 12, 1934.
A nose sun shield may be readily attached to or detached from spectacles. The shield, which is preferably arcuate in cross section and wider at one end than the other, has a pair of spaced hook-shaped spring clamps at its narrower end for pivotally suspending it from the bridge of spectacles. It may be made of any light-weight material, such as Celluloid, or comprise a frame covered with some suitable material. (Owner) Willis J. Physioc, Overhill Rd., Stamford, Conn. Group 39--49--81. Reg. No. 9,036.

PAT. 2,420,806. Pump. Patented May 20, 1947.
Hydraulic pump is provided with a rotor having a plurality of radial cylinders and floating pistons with a thrust roller on the outer end of each piston. A rotatable cup-shaped thrust member has a cylindrical bore which surrounds the rotor. During rotation of the rotor centrifugal force urges the pistons outwardly so that the rollers frictionally engage the wall of the bore of the thrust member. Such frictional contact rotates the thrust member. The thrust member may be adjusted to various angular positions so that its bore will present different elliptical paths for the rollers to vary the strokes of the pistons whereby pump delivery may be varied from zero to maximum. Valve means are provided for controlling and reversing the direction of flow through the pump. Each piston performs two pumping cycles during a single revolution of the rotor. Objectionable side thrusts on the pistons are eliminated and radial thrusts on the rotor and its supporting elements are effectively counteracted. With the pump operating at constant speed, pump delivery may be varied and the direction of flow reversed without producing hydraulic shocks to either the pump or the system to which it may be connected. (Owner) Carl E. Anderson, 50 Milford Ave., Newark, N. J. Group 35--61. Reg. No. 9,037.

PAT. 2,389,574. Utility cart. Patented Nov 20, 1945.
A three-wheel cart has a removable inclined basket. A rearwardly extending central tubular member of the frame has its front end connected to the center of an axle (for two of the wheels) and its rear end bent back upon itself to define a loop handle for the cart. Forwardly of the loop the free end of this member terminates in an upright projection which forms a hanger for a swinging gravity latch. A pair of side braces support the third wheel rearwardly of the axle below the tubular member. The forward ends of the braces are bent to form hooks which overlie the front end of a base plate of the basket, and the swinging latch overlies the opposite end of the base plate. (Owner) Dean Field, 3206 Lemmon Ave., Dallas, Tex. Groups 33-73; 34—99. Reg. No. 9,038.

PAT. 2,425,527. Disappearing hanger hook. Patented Aug 12, 1947.
The hanger has a body portion with hinged side wings which fold against opposite sides of the body to form a compact parcel. A concealed top hook is vertically slidable into and out of a cavity in the body portion. Necktie holders are provided on the bottom edge of the body portion. The hinges and necktie holders are glued to the hanger. The hanger is symmetrically curved and devoid of any sharp edges or projections. (Owner) Orlando A. Gandino, 247 Wainwright Ave., Mount Oliver 27, Pittsburgh, Pa. Groups 25—99; 39—81. Reg. No. 9,039.

PAT. 2,389,788. Traveling case. Patented Nov 27, 1945.
The case comprises two complete elements, one a box having separate compartments and a hinged cover, and the other an accessory comprising two hingedly connected panels with a mirror in at least one of the panels. The accessory may be associated in interfitting relationship with the box, or readily separated and set up in self-supporting fashion for use as a mirror. The panels may be covered with ornamental leather, an intermediate portion of the leather forming the hinge connection. This connection is long enough to fit over the back wall of the box so that the panels will overlie and underlie the top and bottom of the box, fitting snugly between the side walls, which extend above and below the front and back walls. A short strap holds the box and accessory in interfitting relationship, with cooperating snap fasteners provided on the box, panels, and strap. (Owner) Harvey Lathrop. Address correspondence to Frederick Breitenfeld, 521 Fifth Ave., New York 17, N. Y. Groups 25—99; 31—61. Reg. No. 9,040.

Corrections

PAT. 2,422,755. Safety drill. Patented Jun 24, 1947.
This device is a slidable safety cap for covering a switch to prevent it from being accidentally turned on. The cap is readily movable to and from a blocking and nonblocking position. A spring normally holds it in its blocking position. The cap is open at its sides, and one end is provided with lateral flanges which slidably interfit channels in a pair of spaced rails secured to the drill. (Owner) John Strother, Apt. 52, 1864 Seventh Ave., New York 26, N. Y. Group 35—42. Reg. No. 8,898.

PAT. 2,318,149. Ash receiver. Patented May 4, 1943.
An ash tray is constructed to serve a triple purpose. Inside an outer flute-edged tray is fastened a bowl-shaped inner ash tray so that a wedge-shaped recess is formed between the trays. This recess is so designed that when cigars or cigarettes left burning on the tray fall into the recess they are snuffed out. May be made of a wide variety of materials and by many manufacturing processes. (Owner) Sidney Forman, 1715 Longfellow Ave., Bronx, New York, N. Y. Groups 32—29—69; 40. Reg. No. 8,944.

Official Gazette, January 27, 1948

PAT. 2,420,715. Tube construction. Patented May 20, 1947.
A tubular metal construction is shown adaptable for use as a structural beam, column, mast, boom, or like structures which must be capable of withstanding great stress. Basically, the structure consists of a tubular shell and an inner radial web strengthened by spaced flat rings which fit notches provided in the web. The shell is further slotted to accommodate keys formed on both the web and the rings and also welded at the segment edges where keys and slots, etc., are joined to insure rigidity. Modification also shown. (Owner) James F. Millward, 1118 1/2 Third Ave., Seattle 1, Wash. Group 33—12—81. Reg. No. 9,041.

PAT. 2,219,963. Fruit and vegetable cutting apparatus. Patented Oct 29, 1940. Group 35—51. Reg. No. 9,042.

PAT. 2,429,108. Fruit and vegetable cutter, including a pivoted frame having detachable blades. Patented Oct 14, 1947. Group 35—51. Reg. No. 9,043.

These two patents pertain to a combination cutting device particularly designed for use in hotels, restaurants, and similar establishments where sliced and cubed vegetables and fruits are used in large quantities. Patent 2,219,963 shows a wheeled frame supporting a material-receiving compartment having a vertically movable bladed platform on which fruits and vegetables are deposited for slicing. The apparatus includes a worm gear and drive assembly which causes the slicing or cubing operation to be performed as the platform is moved upwardly. Patent 2,429,108 describes an accessory for the above device. The accessory is supported on the structure by a vertical shaft and consists of a unit having a series of horizontally swingable, uniformly spaced cutter blades which pass through the interstices of a bracket having aligned openings enabling vegetables or the like piled on a retractable loading tray to be sliced. Slices are collected in a wire basket which is part of the apparatus. (Owner) George H. Rieder, 3464 Locke Lane, Houston 6, Tex.

The following five patents relating to internal combustion engines of the Diesel type are owned by W. L. Wachr, 1013 Thirteenth Ave., Port Arthur, Tex. Group 35—12—19.

PAT. 2,057,075. Internal combustion engine. Patented Oct 13, 1936. Reg. No. 9,044.

PAT. 2,217,192. Internal combustion engine. Patented Oct 8, 1940. Reg. No. 9,045.

These two patents show internal combustion engines of the Diesel type designed to utilize heat contained in the exhaust gases to operate secondary pistons so that power impulses will be delivered to each piston rod on its return stroke. The engines have oppositely disposed high and low pressure cylinders with the pistons in the respective cylinders connected to a common piston rod for movement in unison. In Patent 2,217,192 hot exhaust gases from the high pressure cylinders and a fine spray of hot water (both under high pressure) are simultaneously injected into the low pressure cylinders with the spray instantaneously converted into steam to deliver the secondary power impulses. In Patent 2,057,075 the spray is converted into steam when it is injected into a chamber already

containing the conducted exhaust gases. The resultant mixture is then injected into a low pressure cylinder. The means for utilising the exhaust gases may be incorporated in engines of various types and sizes.

PAT. 2,393,084. Internal combustion engine. Patented Jan 15, 1946. Reg. 9,046.

PAT. 2,393,085. Internal combustion engine. Patented Jan 15, 1946. Reg. No. 9,047.

These two patents show an engine which has two horizontal rows of spaced open-ended cylinders, with each row on the same level. The rows are offset slightly to permit connection of inner and outer opposed pistons in the cylinders to the crankshaft, which is transversely disposed between the rows. The heads of the opposed pistons in each cylinder have dish-shaped portions to provide a common combustion chamber within the heads of the pistons when in their innermost position. The air is so highly compressed in the combustion chamber as to cause fuel injected therein to ignite and burn, and this tends to separate the pistons. As the pistons separate they uncover ports in the cylinder wall, which communicate with an air chamber surrounding the cylinder, admitting compressed air to aid combustion. On the compression stroke of the pistons a portion of the air compressed between the pistons is forced into the air chamber where it is entrapped when the side walls of the pistons close the ports in the cylinder wall. In one embodiment of the invention two pairs of opposed pistons simultaneously deliver power impulses to three crank pins of the engine crankshaft.

PAT. 2,428,106. Internal combustion engine. Patented Sep 30, 1947. Reg. No. 9,048.
This opposed piston type of Diesel engine is designed so that spaced flywheel cam drums fixedly mounted on the drive shaft of the engine each receive driving impulses at four spaced points simultaneously from two pairs of opposed pistons. Each cam drum also receives two driving impulses from each pair of pistons for each revolution of the drive shaft. Rows of open-ended cylinders with opposed pistons in each cylinder are mounted above and below the drive shaft with the axis of the shaft extending transversely of the axis of the cylinders and centrally between the ends of the cylinders in each row. The driving mechanism between pairs of opposed pistons and the cam drums includes rocking (or walking) beams at the outer ends of the cylinders with the ends of each beam connected to corresponding pistons in two cylinders. The rocking beams are mounted on rock shafts, one journaled on the other. The rock shafts have cam arms which project freely into a peripheral groove in the cam drums to deliver the power impulses thereto. Substantially continuous drive of the drive shaft of this engine is effected so as to provide an extremely smooth running engine, which is capable of developing relatively great power.

PAT. 2,429,110. Heat cradle. Patented Oct 14, 1947.
A cradle made of rust-proof strap iron for giving heat treatments to hands and arms or feet and legs. Two parallel base members extend longitudinally, with a connecting semi-elliptical member at each end and center of cradle. A longitudinal member is secured across tops of curved members. Cross bars under the curved strips fit in adjustable slots in spaced parallel base members. A pillow is placed beneath the cradle on which the patient's arm or leg rests, and an adjustable strap secured to center cross bar holds the wrist or ankle in position. Heat is supplied by a light bulb or other means attached to any upper member of the cradle. (Owner) Otto Staloch, 1316 Glenwood Ave., Flint 3, Mich. Group 33—99. Reg. No. 9,049.

PAT. 2,416,753. Counterbalance for ramps and like pivoted members. Patented Mar 4, 1947.
A counterbalance, which is particularly useful for ramps of landing boats, is provided with strong springs and relatively weak springs to facilitate lifting the ramp to its uppermost position. The strong springs reach the limit of expansion just before completion of upward swing of the ramp. The weak springs then function to assist completion of the upward swing. The counterbalance comprises a pair of spaced parallel tubular housings, each containing a strong and a weak spring. The ends of the housings are connected by head plates which are provided with cylindrical cups deep enough to completely contain the weak springs when they are fully compressed. A fixed and a movable multiple-pulley sheave are mounted between the tubular housings. A cable is wound around the sheaves to draw them together against the tension of the springs when the load end of the cable is pulled. (Owner) A. Hicks, Box 883, Dania, Fla. Groups 35—62; 37—31—32. Reg. No. 9,050.

PAT. 2,429,378. Motorized power unit. Patented Oct 21, 1947.
A motorized wheeled unit having a front and rear adjustable supporting frame to which various implements, such as a rotary grass cutter, roller, harrow, etc., may be removably connected and driven. A flat pulley is provided for driving various other tools. The unit has a rectangular platform with stringers attached to its underside at opposite sides. The front and rear supporting frames are mounted on the ends of the stringers. An elongated rearwardly extending handle for guiding the unit is hinged midway of its length so that its rear section may be actuated downwardly to vertical position to coact with the ground wheels to support the platform in horizontal position. Each ground wheel has a separate clutch controlled by a cross bar on the handle so that they may be simultaneously or separately driven. The unit is provided with numerous sprocket and chain driving connections. (Owner) Ruben Stuebner, 1605 South Santa Anita Ave., Arcadia, Calif. Group 35—21—66—69. Reg. No. 9,051.

DES. PAT. 147,956. Design for a rosary. Patented Nov 25, 1947.
This rosary features transparent spheroidal beads, through each of which may be seen a religious image in contrasting color. The beads may be made of glass or plastic. (Owner) George R. Burck. Address correspondence to Peter F. Keefe, 1015 N Street N. W., Apt. 302, Washington, D. C. Groups 32—98; 39—61—81. Reg. No. 9,052.

The following three patents relating to tube structure for television and like structures are owned by David Appleheme, #5 at 1547 North Palm Canyon, Palm Springs, Calif. Group 36—61.

PAT. 2,030,492. Glow tube control system. Patented Feb 11, 1936. Reg. No. 9,053.
Glow tubes, used in forming images in television receivers, etc., require high voltages to overcome the lag of light variations behind current variations, due, in some cases, to the viscosity of the gas which fills the tube. This lag may be avoided by the construction of a double-sectioned tube, one section of which is filled with gas and sealed against the other section by a thin membrane, to prevent gas exchange. The other section, which is evacuated, houses an anode, cathode, and other electron-generating parts of the tube. The gas-filled section is caused to glow by electrons generated in the evacuated section which are able to ionize the gas at much lower voltages.

PAT. 2,048,094. Television receiver. Patented Jul 21, 1936. Reg. No. 9,054.
This patent describes a tube for a television receiver which emits an X-ray type beam instead of the usual bright source of illumination. The short wave radiations of intense penetrating power impinging on a fluorescent screen are converted to light rays which persist for a longer

period than the conventional light source. This produces a steady flickerless image in that the screen remains illuminated for a period sufficient to bridge the period of persistence of vision.

PAT. 2,294,533. Electronic emission device. Patented Sep 1, 1942. Reg. No. 9,055.
A double-sectioned evacuated tube structure makes possible an amplified power output by utilizing high potential differences between a set of electrodes in each of the sections. Increased electronic intensity is partially due to an arrangement in which a number of electric fields are created which act upon a common electronic stream. One of the sections includes a conventional triode in which a potentiometer connection is formed. An anticathode is formed in the other section of the tube to receive at least a portion of the electronic stream. In the latter section a tubular electrode is included, the opening of which is small in comparison to its length. This electrode directs and accelerates the electron stream and also serves as an electrostatic shield to prevent the potential of the anticathode from affecting the operation of the triode.

PAT. 2,425,244. Flexible arch support. Patented Sep 30, 1947.
An arch supporter and inner sole designed to reduce foot shock in walking and relieve the instep of pressure when the foot is at rest. An insole comprises a toe plate, an arch support, and a heel plate, all hingedly connected. A pair of upwardly arched plates overlap slidably at the center of the arch and are hinged to the toe and heel plates respectively, each having a lever end adjacent the hinges. A taut elastic cover is stretched the entire length of the insole to press down on the hinged ends when pressure is relieved from the arch and to protect the foot from the sliding action of the overlapping plates. Sponge rubber fillers are seated under the cover in the recesses formed by the contour of the arch plates and in the space under the plates. (Owner) Duane Boles, Box 133, Toledo, Oreg. Group 39--16. Reg. No. 9,056.

PAT. 2,197,362. Dishwashing machine. Patented Apr 16, 1940.
An economically operated electric dishwashing machine and water-heating tank with valve controlled means for delivering a moderate supply of clean hot water in each washing cycle. The motor starts with the closing of the door to the wash chamber. The water is automatically turned on and soap supply measured and evenly distributed into the water. Clean hot water is forcibly thrown in whirling jets upon all sides of the dishes and then gravitates to bottom of wash chamber and passes through a strainer to a waste pipe. (Owner) Joseph M. Murphy, c/o U. S. V. A. Center, Biloxi, Miss. Group 35--89. Reg. No. 9,057.

PAT. 2,429,572. Temperature alarm. Patented Oct 21, 1947.
A simple circuit closer and temperature alarm which may be set for a predetermined temperature, to be used in brooders, incubators, or hothouses. The alarm mechanism includes contacts carried by strips of conductive material so mounted that one may move toward the other closing a circuit through conductor wires attached to fasteners on supporting brackets. Movement of the strips is controlled by a thermostat so that when a predetermined variation in temperature occurs a bell is sounded or a light flashed. (Owner) Andy H. Viscosan, Box 68, Raynesford, Mont. Groups 25--99; 33-69; 36--19. Reg. No. 9,058.

PAT. 2,113,908. Trap. Patented Apr 12, 1938.
An insect or rodent trap is attached, as a cover, to a garbage can, the contents of which act as bait. The trap has a perforated false bottom held removably by a sleeve extending from a central opening in the top. Several doorways lead to compartments which extend radially from the sleeve. Compartments have mesh-covered openings at farther end admitting daylight, and trap gate units which admit insects or rodents, then close to trap them therein. Parts are easily disassembled for cleaning, and gate units are varied to admit flies or rodents. (Owner) Frank L. Thompson, Rt. 4, Box 158-D, Oklahoma City, Okla. Group 33--99--73. Reg. No. 9,059.

PAT. 2,427,143. Broken line making attachment for draftsman's scales. Patented Sep 9, 1947.
A tool to be attached to a draftsman's scale to produce uniform broken lines. A carriage of thin flexible material, having a wedge-shaped slot for insertion of a marking implement extends over the top of the scale and has prongs which project into grooves in the sides of the equilateral triangle. The carriage is supported on a cam wheel. As the user moves the carriage along the scale, the wheel rotates and the teeth periodically lift the pencil, uniformly interrupting the line being scribed. (Owner) Donald G Jackson, 384 Ashtabula St., Pasadena 6, Calif. Group 39--11--54. Reg. No. 9,060.

PAT. 2,229,575. Bath protector for artificial limbs. Patented Jan 21, 1941.
A waterproof protector for an artificial limb, to be worn in shower or bath. A bag or sleeve has foot portion, with stiff or flexible sole, directly vulcanized or otherwise made watertight. The bag is of proportions to be easily drawn over the artificial foot and leg portions. It is gathered at top by drawstring and sealed by wide elastic waterproof band fastened by snaps. The protector may be made of rubberized cloth or oiled silk. (Owner) Aaron Kaplan, 203 Williamsburg Rd., Ardmore, Pa. Groups 23--66; 30--41. Reg. No. 9,061.

The following five patents relating to shoemaking processes are owned by William H. Doherty, 8843 62d Drive, Elmhurst, N. Y. Groups 30--21--22; 31--41; 35--59.

PAT. 2,386,667. Shoe sole. Patented Oct 9, 1945. Reg. No. 9,062.

The shoe sole described in this patent has a frame upon which any material such as rubber, plastic, or leather may be molded or otherwise built. The sole is flexible longitudinally and is designed not to curve or warp laterally, thus insuring better service and more even wearing.

PAT. 2,406,005. Sole and heel former. Patented Aug 20, 1946. Reg. No. 9,063.
An integral sole, shank, and heel may be molded on footwear by means of this device. It consists of a single flexible band having overlapping ends which are drawn into the shape of the various portions of the integral sole by ratchet and screw means so that it assumes the marginal outlines of the sole, heel, and shank. In use, the device is mounted on the sole of the footwear by nails, after which rubber or plastic may be poured into the mold in the conventional manner. The device may be used by the shoe-repair man to re-sole or re-heel worn footwear.

PAT. 2,406,359. Vacuum last and sole forming machine. Patented Aug 27, 1946. Reg. No. 9,064.
This machine for soling or repairing shoes features a flexible band which outlines the sole of the shoe being repaired and a vacuum last which may be adjusted to conform with the original last upon which the shoe was made. When the shoe is placed on the last, it is first sterilized by steam, after which vacuum is applied so that the inner sole adheres to a foot plate. This flattens the inner sole so that a level rubber or composition sole may be poured within the band and set by heat. Provision is made for an instep plate which may be inserted to form the edge of the heel and a foot and heel plate which may be interchanged for right or left shoes.

PAT. 2,408,413. Supporting frame for articles of footwear. Patented Oct 1, 1946. Reg. No. 9,065.
This patent relates to a supporting frame for footwear

upon which a rubber or plastic sole, shank, and heel may be fabricated so that the entire foot is substantially supported by the shoe. The frame may be made of a single wire wound in labyrinthine fashion to form heel, shank, arch, and counter parts.

PAT. 2,421,019. Supporting frame for articles of footwear. Patented May 27, 1947. Reg. No. 9,066
This patent is somewhat similar to Patent 2,406,413 (Reg. No. 9,065) and describes a supporting frame for a demountable heel for shoes. It embodies a spring wire frame embedded within the heel which includes a hollow portion between upper and lower sections. The hollow may be filled with sponge rubber if desired.

PAT. 2,272,112. Stove lid lifter. Patented Feb 3, 1942.
A stove-lid lifter featuring a handle designed to protect the hand from being burned. The lifter is of conventional design, with a prong at one end to engage the eye of a stove lid. The handle, which is in the form of an open rectangle somewhat resembling a flat-iron handle, is attached to a horizontal portion at other end of lifter. A shield of insulating material is spaced by washers between the handle and body, forming an air space on either side of shield. The hand-grip is made of wood or fiber. (Owner) William A. Edington, Keatchie, La. Groups 33--59--62; 40. Reg. No. 9,067.

DES. PAT. 147,504. Combined clock and photo mount. Patented Sep 16, 1947.
This combination mounting features a clock in center position with two medallion-like photograph enclosures on each side. (Owner) Stanley F. Miller, 1736 East 14th St., Oakland 6, Calif. Groups 25--96; 34--61; 40. Reg. No. 9,068.

DES. PAT. 147,772. Unit combination dining table and chairs. Patented Oct 28, 1947.
This unit combination shows a table in the form of a Greek cross with a chair fitting into each corner and facing one arm of the cross. (Owner) Tollie L. Williamson, Little Rock Restaurant Supply Co., 813 East 2d St., Little Rock, Ark. Group 25--11--14. Reg. No. 9,069.

PAT. 2,427,522. Shingle and shingle covering. Patented Sep 16, 1947.
An L-shaped shingle, fabricated from sheets of suitable waterproof material, which is reversible, thus enabling selection of one of two designs for a shingled surface. Inventor states that a shingle approximately 30" long and 15" wide at widest part has proved economical. The short leg of the L has a self-aligning straight edge, and the long leg has two tabs with a recess between. Thus guides are provided for laying one row of shingles in staggered overlapping relation on the preceding lower row. The broad end of one shingle abuts narrow end of another. (Owner) Carl V. Cassry, c/o Jacksonville Tile Co., 316 Riverside Ave., Jacksonville 4, Fla. Groups 24--23; 29--32; 32--92. Reg. No. 9,070.

TRANSLATIONS

Items noted below are available at the prices quoted, from the translating service only. O.T.S. does not undertake to edit the reports nor does it accept the responsibility for the accuracy of the translations.

GER. PAT. 719671-T. BAUMER MASCHINENFABRIK A. G., WUPPERTAL OBERBARMEN. Appliance for winding freshly spun rayon filaments. (Translation of Ger. Pat. 719671) Nov 1947. 5 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $4.75
For information concerning original German patent, see this Bibliography, v. 5, p. 846.

GER. PAT. 718244-T. BOCHMANN, OTTO. Process and appliance for winding freshly spun wet rayon filaments. (Translation of Ger. Pat. 718244) Oct 1947. 8 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $15.25
For information concerning original German patent, see this Bibliography, v. 5, p. 846.

GER. PAT. 710375-T. DEUTSCHE GOLD. UND SILBER SCHEIDE. ANSTALT, FRANKFURT AM MAIN. Process for the manufacture of porafrax and gas-impervious structural parts. (Translation of Ger. Pat. 710375) 1947. 4 p. For sale by Patent Research Laboratory, 1781 N. 15th Street, Brooklyn 29, N. Y., $6.00
For information concerning original German patent, see this Bibliography, v. 5, p. 837.

GER. PAT. 706793-T. DEUTSCHE HYDRIERWERKE A. G., RODLEBEN. Process for the manufacture of high-molecular sulfonation products from unsaturated derivatives of aliphatic alcohols containing more than 8 carbon atoms. (Translation of Ger. Pat. 706793, supplement to patent 542048) 1947. 4 p. For sale by Patent Research Laboratory, 1781 N. 15th Street, Brooklyn 29, N. Y., $6.00
For information concerning original German patent, see this Bibliography, v. 4, p. 1094.

PB L 32532-S3. I. G. FARBENINDUSTRIE A. G. Indanthrene printing olive GW suprafix paste. (Translation of Supplement III to its Dyestuffs, PB 32532) Oct 1947. 4 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $2.50
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-S53. I. G. FARBENINDUSTRIE A. G. Immedial black V extra. (Translation of Supplement 53, to its Dyestuffs, PB 32532) Oct 1947. 3 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $2.00
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-S54. I. G. FARBENINDUSTRIE A. G. Immedial olive XB. (Translation of Supplement 54 to its Dyestuffs, PB 32532) Oct 1947. 3 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $1.50
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-855 I. G. FARBENINDUSTRIE A. G.
Immedial olive GW. (Translation of Supplement 55 to its Dyestuffs, PB 32532) Oct 1947. 3 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $1.50
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-856 I. G. FARBENINDUSTRIE A. G.
Immedial olive B. (Translation of Supplement 56 to its Dyestuffs, PB 32532) Oct 1947. 3 p.
For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $2.75
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-857 I. G. FARBENINDUSTRIE A. G.
Immedial currant B extra. (Translation of Supplement 57 to its Dyestuffs, PB 32532) Oct 1947.
2 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $1.50
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-858 I. G. FARBENINDUSTRIE A. G.
Immedial brown BRD extra. (Translation of Supplement 58 to its Dyestuffs, PB 32532) Oct 1947.
4 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $3.75
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-859 I. G. FARBENINDUSTRIE A. G.
Immedial fast dark brown B extra. (Translation of Supplement 59 to its Dyestuffs, PB 32532) Oct 1947.
4 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $3.75
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-860 I. G. FARBENINDUSTRIE A. G.
Immedial black brown S extra. (Translation of Supplement 60 to its Dyestuffs, PB 32532) Oct 1947.
3 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $3.25
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-861 I. G. FARBENINDUSTRIE A. G.
Immedial black brown GL extra. (Translation of Supplement 61 to its Dyestuffs, PB 32532) Oct 1947.
3 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $1.50
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-862 I. G. FARBENINDUSTRIE A. G.
Immedial black brown V extra. (Translation of Supplement 62 to its Dyestuffs, PB 32532) Oct 1947.
2 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $1.50
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-863 I. G. FARBENINDUSTRIE A. G.
Immedial green BE extra. (Translation of Supplement 63 to its Dyestuffs, PB 32532) Oct 1947. 3 p.
For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $3.25
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-864 I. G. FARBENINDUSTRIE A. G.
Immedial dark green B. (Translation of Supplement 64 to its Dyestuffs, PB 32532) Oct 1947. 3 p.
For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $3.25
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-865 I. G. FARBENINDUSTRIE A. G.
Immedial direct blue B extra. (Translation of Supplement 65 to its Dyestuffs, PB 32532) Oct 1947.
4 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $6.00
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-866 I. G. FARBENINDUSTRIE A. G.
Immedial direct blue BL extra. (Translation of Supplement 66 to its Dyestuffs, PB 32532) Oct 1947.
3 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $5.00
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

Translations (contd)

PB L 32532-867. I. G. FARBENINDUSTRIE A. G. Immedial blue V 300 extra conc. (Translation of Supplement 67 to its Dyestuffs, PB 32532) Oct 1947. 2 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $2.00
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-868. I. G. FARBENINDUSTRIE A. G. Immedial carbon L for paper. (Translation of Supplement 68 to its Dyestuffs, PB 32532) Oct 1947. 4 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $4.75
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-876. I. G. FARBENINDUSTRIE A. G. Indocarbon JB suprafix paste. (Translation of Supplement 76 to its Dyestuffs, PB 32532) Oct 1947. 3 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $3.25
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-879. I. G. FARBENINDUSTRIE A. G. Printing indocarbon CLN. (Translation of Supplement 79 to its Dyestuffs, PB 32532) Oct 1947. 3 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $3.25
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 32532-8131. I. G. FARBENINDUSTRIE A. G. Fast red salt RL (HNOV DB). (Translation of Supplement 131 to PB 32532) Nov 1947. 11 p.
For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $14.00
For abstract of original German microfilm, see this Bibliography, v. 3, p. 1.

PB L 68693-T. I. G. FARBENINDUSTRIE A. G. Agents imparting water-repellency and soft finish. (Translation of PB 68693) Dec 1947. 6 p.
For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $9.00
For abstract of original German article, see this Bibliography, v. 6, p. 73.

PB L 68608-T. I. G. FARBENINDUSTRIE A. G. Aqueous dispersions for finishing fibers and fabrics. (Translation of PB 68608) Dec 1947. 5 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $8.50
For abstract of original German article, see this Bibliography, v. 6, p. 60.

PB L 69079-T. I. G. FARBENINDUSTRIE A. G. Auxiliaries of high wetting and dispersing capacity. (Translation of PB 69079) Dec 1947. 4 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $7.50
For abstract of original German article, see this Bibliography, v. 5, p. 1200.

PB L 75713-T. I. G. FARBENINDUSTRIE A. G. Detergent for cotton and wool. (Translation of PB 75713) Dec 1947. 7 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $7.50
For abstract of original German article, see this Bibliography, v. 6, p. 88.

PB L 75217-T. I. G. FARBENINDUSTRIE A. G. Detergent mixtures for wool, rayon and silk. (Translation of PB 75217) Dec 1947. 5 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $9.50
For abstract of original German article, see this Bibliography, v. 5, p. 1209.

PB L 68773-T. I. G. FARBENINDUSTRIE A. G. Finishing agents for increasing strength and shrink resistance of viscose and cuprammonium rayon. (Translation of PB 68773) Dec 1947. 4 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $6.00
For abstract of original German article, see this Bibliography, v. 6, p. 76.

PB L 66833-T. I. G. FARBENINDUSTRIE A. G. Finishing agents increasing tensile strength, shrink resistance and crease resistance. (Translation of PB 66833) Dec 1947. 8 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $12.00
For abstract of original German article, see this Bibliography, v. 6, p. 68.

PB L 68655-T. I. G. FARBENINDUSTRIE A. G. Impregnating compounds of high mechanical strength and elasticity. (Translation of PB 68655) Dec 1947. 8 p.
For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $9.50
For abstract of original German article, see this Bibliography, v. 6, p. 71.

PB L 45616-T. I. G. FARBENINDUSTRIE A. G. Improved centrifugal pot for production of continuous rayon filaments. (Translation of PB 45616) Nov 1947. 6 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $5.00
For abstract of original German article, see this Bibliography, v. 4, p. 348.

PB L 66855-T. I. G. FARBENINDUSTRIE A. G. Mineral lubricants for wool. (Translation of PB 66855) Dec 1947. 8 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $14.50
For abstract of original German article, see this Bibliography, v. 6, p. 69.

PB L 17619-T2. I. G. FARBENINDUSTRIE A. G. Opaque foils for linings. (Translation of PB 17619) (Progress Interpreted Translation Plastics 14) Mar 1947. 14 p. For sale by Progress Interpreted, 5410--14th Place, Michigan Park Hills, Hyattsville, Md., $2.50
For abstract of original German article, see this Bibliography, v. 2, p. 548.

PB L 75612-T. I. G. FARBENINDUSTRIE A. G. Preparation of cleansing and wetting agents. (Translation of PB 75612) Dec 1947. 7 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $13.00
For abstract of original German article, see this Bibliography, v. 6, p. 84.

PB L 45615-T. I. G. FARBENINDUSTRIE A. G. Process and auxiliaries for continuous ripening of viscose. (Translation of PB 45615) Oct 1947. 11 p.
For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $11.00
For abstract of original German article, see this Bibliography, v. 4, p. 348.

PB L 45622-T. I. G. FARBENINDUSTRIE A. G. Process for imparting permanent water-repellency to synthetic and natural fibers. (Translation of PB 45622) Dec 1947. 13 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N.Y., $19.75
For abstract of original German article, see this Bibliography, v. 4, p. 348.

PB L 68760-T. I. G. FARBENINDUSTRIE A. G. Process for increasing the abrasion fastness of regenerated cellulose fibers. (Translation of PB 68760) Dec 1947. 7 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $10.50
For abstract of original German article, see this Bibliography, v. 6, p. 75.

PB L 68787-T. I. G. FARBENINDUSTRIE A. G. Process for obtaining a washfast, water-repellent finish. (Translation of PB 68787) Dec 1947. 6 p.
For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $8.00
For abstract of original German article, see this Bibliography, v. 6, p. 76.

PB L 75123-T. I. G. FARBENINDUSTRIE A. G. Process for preparing cleansing, wetting, and dispersing agents. (Translation of PB 75123) Dec 1947. 6 p.
For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $8.50
For abstract of original German article, see this Bibliography, v. 5, p. 1205.

PB L 45606-T. I. G. FARBENINDUSTRIE A. G. Production of high strength fibers from polyethylene halides. (Translation of PB 45606) Oct 1947. 10 p.
For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $10.50
For abstract of original German article, see this Bibliography, v. 4, p. 347.

PB L 45568-T. I. G. FARBENINDUSTRIE A. G. Simplified process for producing printing reliefs. (Translation of PB 45568) Nov 1947. 6 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $6.00
For abstract of original German article, see this Bibliography, v. 4, p. 346.

PB L 66849-T. I. G. FARBENINDUSTRIE A. G. Synthetic compounds for wetting, softening, and finishing. (Translation of PB 66849) Dec 1947. 8 p.
For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $12.50
For abstract of original German article, see this Bibliography, v. 6, p. 69.

PB L 45613-T. I. G. FARBENINDUSTRIE A. G. Spinstor for wet cellulose hydrate filaments. (Translation of PB 45613) Nov 1947. 8 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $11.25
For abstract of original German article, see this Bibliography, v. 4, p. 348.

Translations (contd)

PB L 45564-T. I. G. FARBENINDUSTRIE A. G. Two-stage process for manufacturing threads, wires, or bands from polymeric vinyl compounds. (Translation of PB 45564) Nov 1947. 9 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $11.00
For abstract of original German article, see this Bibliography, v. 4, p. 346.

GER. PAT. 728235-T. LEITZ, GUSTAVE. Economical textile lubricants for woolen and worsted systems. (Translation of Ger. patent 728235) Dec 1947. 5 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $6.00
For information concerning original German patent, see this Bibliography, v. 5, p. 928.

GER. PAT. 719025-T. WEIGAND, HANS. Process for increasing the lichtfastness and heat resistance of cellulose ether and cellulose ester products. (Translation of Ger. Patent 719025) Nov 1947. 8 p. For sale by Research Information Service, 509 Fifth Avenue, New York 17, N. Y., $21.00
For information concerning original German patent, see this Bibliography, v. 5, p. 929.

PB L 726-T. WIEDMANN. Preparation of alpha-substituted acroleins. (Translation of PB 726) (Transervice Translation 23) May 1947. 1 p. For sale by Transervice, Box 647, Kingsport, Tenn., $2.00
For abstract of original German article, see this Bibliography, v. 1, p. 42.

PB L 856-T. WOLF. Preparation of hydroaromatic ketones in a pure state through the acetals. (Translation of PB 856) (Transervice Translation 26) May 1947. 4 p. For sale by Transervice, Box 647, Kingsport, Tenn., $3.00
For abstract of original German article, see this Bibliography, v. 1, p. 48.

PB L 40625-T. WULFF, C. Concerning irolitul. (Translation of PB 40625) (Transervice Translation 28) May 1947. 2 p. For sale by Transervice, Box 647, Kingsport, Tenn., $2.00
For abstract of original German article, see this Bibliography, v. 3, p. 626.

GER. PAT. 710308-T. WÜLFING, JOHANN A., CHEMISCHE FABRIK, BERLIN. Process for the manufacture of sodium-calcium-gold-keratin compounds. (Translation of Ger. Patent 710308) 1947. 9 p. For sale by Patent Research Laboratory, 1781 E. 15th Street, Brooklyn 29, N. Y., $10.00
For information concerning original German patent, see this Bibliography, v. 5, p. 925.

PUBLICATIONS ISSUED

BY

OFFICE OF TECHNICAL SERVICES

PB L 52003. GERMANY. REICHSAMT FÜR WIRTSCHAFTSAUSBAU. First meeting of the cooperative group for the analytical and preparative separation of hydrocarbon mixtures, April 5, 1940. Apr 1940. 131 p. Price: Multilith-$3.50
For abstract, see this issue of the Bibliography, p.

PB L 67563-S. KOHORN, OSCAR, & CO., LTD., tr. Birth of a rayon staple fiber plant. (A translation of the German sound track which accompanied the German film, "Birth of a rayon staple fiber plant") n. d. 8 p. Price: Mimeo-25¢
For abstract, see this issue of the Bibliography, p.

PB L 81284. MCCULLOCH, WILLIAM W. The "C" process of making molds and cores for foundry use. (FIAT Final Rept 1158) May 1947. 9 p. Price: Mimeo-25¢
This report describes a new process for making sand molds and cores which are suitable for the production of precision castings in a wide variety of metals. The process is unique in its use of a plastic component which, under application of heat, bonds the sand grains together and forms a mold or core having unusual surface smoothness, high gas permeability, and dimensional stability. The process is especially suitable for the production of steel castings with very thin sections. Appendix I contains a list of German personnel interviewed, Appendix II photographs of various molds, pattern plate, cores and castings.

PB L 75831. MITTER, B. K. and others. Technical survey of electric cable industry in Germany. (BIOS Final Rept 1136, Item 21, 22, 31) Sep-Nov 1946. 64 p. Price: Mimeo-$2.00
This report covers a general survey of the manufacturing practices in Germany for the principal types of cables and wires, based on observations and investigations made during the brief visits paid to a few selected cable companies who rank among the largest producers in the country. In addition, a small section of this report has been devoted to a brief outline of the manufacturing processes for some of the most important insulating materials. It was noted, that the technical features of the design and development of certain classes of machinery, viz. extruding machines, calenders and chiefly the enamelling plants, are very far advanced in Germany. A glossary of compounding and mixing ingredients is given in Appendix I; Outline sketch of copper annealing equipment using illuminating gas is shown in Appendix II; and design of strand combinations for circular cores of minimum diameters is shown in Appendix III.

PB L 85171. U. S. OFFICE OF TECHNICAL SERVICES. INDUSTRIAL RESEARCH AND DEVELOPMENT DIVISION. Utilization of Alaskan salmon cannery waste. Part 1. (Rept 1) Dec 1947. 93 p. Price: Mimeo-$2.00
This is the first of two parts of a report on utilization of Alaskan salmon cannery waste under OTS Contract Cac-47-17. The research grant was made to the Alaska Fisheries Experimental Commission and research was carried out at the Fishery Products Laboratory, Ketchikan, Alaska, and the Fishery Technological Laboratory, Seattle, Wash. The present report is confined to a brief introduction followed by a detailed report by G. Ivor Jones and Edward J. Carrigan of the survey made at the start of this investigation to determine what possibilities seemed most promising before selecting fields for laboratory work. It contains a complete review of the literature on the subject. Also included are reports on research completed on processing salmon waste for vitamin A oils, and results of preliminary tests on feeding of salmon cannery waste to fish in fish hatcheries. Another report will appear later containing a detailed introduction giving comprehensive background of the status of the Alaska salmon cannery waste situation, recommendations for future work, and suggested applications of research completed at that time.

U. S. GOVERNMENT PRINTING OFFICE O—1948